

AR 5.2.1

J. R. SIMPLOT COMPANY P.O. BOX 912 POCATELLO, IDAHO 83204
(208) 232-6620 (PLANT) (208) 238-2700 (GROUP OFFICES)

MINERALS & CHEMICAL GROUP

Received

January 31, 1991

FEB 1 1991]

SUPERFUND BRANCH

CERTIFIED MAIL

Bill Adams
U.S. Environmental Protection Agency
M/S HW-113, 11th Floor
1200 Sixth Avenue
Seattle, WA 98101

Re: J.R. Simplot Company
Response to Request for Information
Eastern Michaud Superfund Site

Dear Mr. Adams:

The J.R. Simplot Company, hereinafter referred to as "Simplot", hereby responds to a letter received on November 7, 1990 from the United States Environmental Protection Agency. The letter was directed to John Cochran of the J.R. Simplot Company, requesting information on the Eastern Michaud Superfund Site located in Pocatello, Idaho. The EPA and Simplot agreed that Simplot's response to this Request for Information was due on or before January 30, 1991.

RESPONSES TO REQUEST FOR INFORMATION

Request No. 1:

A description of the specific size, location and status of the gypsum decant pond and the east overflow pond including dates of installation and lining.

Response:

A. Gypsum Decant Pond:

1. Size:
Length at top = 300 feet
Width at top = 200 feet
Working depth = 4 feet
Volume = 2,000,000 gallons

USEPA SF

1273849

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7837

0002

Volume 1 of 2

2. Location:
Exhibit #1, which is attached hereto and incorporated herein by reference, depicts the Gypsum Decant Pond.
 3. Date Operational: 1972.
 4. Liner:
 - a. Material: "Griffolyn" Type 65 black reinforced plastic.
 - b. Date Installed: 1972.
 5. Status: Active.
- B. East Overflow Pond:
1. Size:
Length at top = 272 feet
Width at top = 132 feet
Depth = 8 feet
Volume = 2,150,000 gallons
 2. Location:
See Exhibit #1 which depicts the East Overflow Pond.
 3. Date Pond was Operational: Unknown.
 4. Date Pond was Lined: Unlined.
 5. Status: Active.

Request No. 2:

The effects of leaching from the two waste gypsum piles and the phosphate ore pile and results of any environmental investigations performed.

Response:

- A. PEI Associates prepared a study for the EPA titled, EVALUATION OF WASTE MANAGEMENT FOR PHOSPHATE PROCESSING, which included Simplot gypsum system in the presurvey sampling. PEI Associates placed six monitoring wells around the gypsum stacks and collected samples. Ford Chemical Laboratory, Inc. analyzed split samples collected by PEI Associates. Ford Chemical Laboratory, Inc. results were included as Appendix F of the PEI Associates report.

Simplot has continued to sample four of the PEI constructed wells. These samples have been analyzed by Ford Chemical. (See response to Request No. 8). Two of the six well casings constructed by PEI have been damaged by underground movement and do not allow sample equipment to be lowered into the casings.

- B. Exhibit #2, which is attached hereto and incorporated herein by reference, is a copy of a study conducted by Dames & Moore for Simplot, titled PERMEABILITY OF SOILS AND MINERALOGICAL INVESTIGATION OF "SIMCRETE" FOR J.R. SIMPLOT COMPANY, POCATELLO, IDAHO.
- C. Exhibit #3, which is attached hereto and incorporated herein by reference, is a copy of a report titled HUNDRED FOLD REDUCTION IN PERMEABILITY UNDER A GYPSUM STACK, and was presented at the 1980 Environmental Symposium sponsored by The Fertilizer Institute.
- D. Simplot has attached portions of reports prepared by Dames & Moore which contain information about permeability of gypsum and soil. The titles of the reports are:

Exhibit #4, which is attached hereto and incorporated herein by reference, is a copy of a REPORT OF SOIL STUDIES, GYPSUM TAILINGS POND, POCATELLO, IDAHO, FOR THE J.R. SIMPLOT COMPANY, July, 1962.

Exhibit #5, [Confidential Business Information], which is attached hereto and incorporated herein by reference, is a copy of a report titled RECOMMENDATIONS FOR PRESENT POND CONTROL PROGRAM, TAILINGS POND DEVELOPMENT, SIMPLOT PLANT, POCATELLO, IDAHO, FOR THE J.R. SIMPLOT COMPANY, May, 1963.

Exhibit #6, [Confidential Business Information], which is attached hereto and incorporated herein by reference, is a copy of a REPORT OF PROJECT PLANNING, PROPOSED TAILINGS POND (TP-K 2.1), POCATELLO, IDAHO, FOR THE J.R. SIMPLOT COMPANY, January, 1966.

Exhibit #7, [Confidential Business Information], which is attached hereto and incorporated herein by reference, is a copy of a REPORT OF INVESTIGATION AND DESIGN, PROPOSED EARTHFILL DIKES, TAILINGS POND (TP-K2.1) EXPANSION, NEAR POCATELLO, IDAHO, FOR THE J.R. SIMPLOT COMPANY, Dec. 1974.

Exhibit #8, which is attached hereto and incorporated herein by reference, is a copy of a REPORT OF LABORATORY INVESTIGATION ON EXISTING GYPSUM TAILINGS IMPOUNDMENT FACILITY, POCATELLO, IDAHO, FOR THE J.R. SIMPLOT COMPANY, April, 1987.

Exhibit #9, which is attached hereto and incorporated herein by reference, is a copy of a report titled INVESTIGATION AND STABILITY ANALYSIS OF TAILINGS POND NO.2, J.R. SIMPLOT COMPANY'S POCATELLO, IDAHO OPERATIONS, FOR THE J.R. SIMPLOT COMPANY, Jan. 1988.

Exhibit #10, which is attached hereto and incorporated herein by reference, is a copy of a SUMMARY REPORT, FOLLOW-UP INVESTIGATION AND LABORATORY TESTING, GYPSUM TAILINGS POND NO.2, J.R. SIMPLOT COMPANY'S POCATELLO OPERATIONS, FOR J.R. SIMPLOT COMPANY, March, 1988.

- E. Simplot has no studies which have analyzed leaching from the phosphate ore pile. However, Simplot has analyzed water used to transport phosphate ore through a 26-mile pipeline. The phosphate ore and water mixture slurry has been analyzed for hazardous waste characteristics according to procedure SW846; the dry phosphate ore has been analyzed for hazardous waste characteristics according to the TCLP procedure; the liquid portion of the slurry has been analyzed for drinking water parameters. Exhibit #11, which is attached hereto and incorporated herein by reference, contains the analyses for one slurry sample, one dry ore sample and two liquid portions of the slurry.

Exhibit #12, which is attached hereto and incorporated herein by reference, are copies of information generated by the U.S. Geological Survey on water which had been slurried with western phosphate ore.

- F. Exhibit #13, which is attached hereto and incorporated herein by reference, is a copy of a report titled, GEOLOGIC INVESTIGATION OF THE DON COMPLEX, SPRING 1976.

Request No. 3:

A complete history of on-site landfill operations including:

- A. Exact location and operation dates of each landfill.
- B. The type, volume, and containers for each hazardous substance disposed in each landfill.

- C. Design specifications of each landfill, this is, liners, caps, leachate collection systems, and so forth.

Response:

A. Active Solid Waste Landfill:

1. Location: See Exhibit #14, which is attached hereto and incorporated herein by reference, which is Simplot drawing 130-6480-105, Tailing Pond #2, Topographic, Current Lift Details, New Proposed Access Road/8% Grade, Revision "A", 12-09-82, Ralph Petrie.
2. Date Operational: Unknown.
3. Type, volume, and containers for each hazardous substance: Simplot has no records to determine whether any hazardous substances were ever disposed of in the Active Solid Waste Landfill. Simplot presently has a policy which prohibits the disposal of hazardous substances in the active solid waste landfill.
4. Design Specifications: The solid waste landfill is constructed partly on virgin earth and the No. 1 phosphogypsum tailings stack.
 - a. Liner: None.
 - b. Cap: Earth.
 - c. Leachate collection system: None.

B. Original Trash Landfill (Abandoned):

1. Location: See Exhibit #14, which depicts the original Trash Landfill.
2. Date Operational: Unknown.
3. Type, volume, and containers for each hazardous substance: Simplot has no records to determine whether any hazardous substances were ever disposed of in the Original Trash Landfill.

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4. Design Specifications: The landfill was constructed on virgin earth.
- a. Liner: None.
 - b. Cap: Earth.
 - c. Leachate collection system: None.

Request No. 4:

A complete history of spills of feedstocks, intermediate and final products and hazardous materials on-site.

Response:

Simplot has no records which provide a complete history of spills of feedstocks, intermediate and final products and hazardous materials on-site. Exhibit #15, which is attached hereto and incorporated herein by reference, are copies of Simplot Spill Release/Report Forms. Two spills not covered by the Simplot Release/Report forms that we have knowledge of are as follows:

- A) Collapse of Tank #26 on Oct. 26, 1974, which also broke the valve off Tank #23, caused a spill of approximately 500 tons (as P2O5) of phosphoric acid. The majority of the phosphoric acid spilled was recovered on site and the NPDES discharge permit limit was not exceeded.
- B) 80 ton spill of sulfuric acid from a railcar occurred on Sept. 28, 1974. This spill was contained in the waste treatment system and the NPDES discharge permit limit was not exceeded.

Request No. 5:

Complete descriptions of hazardous substance handling and disposal practices on-site including operations at the hazardous waste storage area and a description of any hazardous substances disposed in the waste gypsum piles.

Response:

- A. Hazardous Waste Storage Area. Simplot withdrew their permit for a Treatment Storage and Disposal Facility.
- B. Hazardous Substance Handling & Disposal. The description of various plant processes are contained in the pamphlet titled PRODUCT FLOW CHARTS & INFORMATION SHEETS, which is

attached hereto and incorporated herein by reference as Exhibit #16. Spills of acids are:

- (1) Recovered at the originating plant.
- (2) Recovered at another plant using the material.
- (3) Recovered for sale as dilute liquid fertilizer.
- (4) Neutralized and the solid waste disposed of at the solid waste landfill.

C. Hazardous Substances to Gypsum Pile. Simplot has no records to determine whether any hazardous substances were ever disposed of in the Gypsum Pile. Simplot presently has a policy which prohibits the disposal of hazardous substances in the gypsum pile.

Request No. 6:

A description of the handling and disposal practices for spent oil and solvents on-site.

Response:

Spent oil is accumulated in a tank and transported by Cowboy Oil to the Ashgrove Cement Plant where it is burned as supplemental fuel. Solvents are collected and returned to Safety-Kleen for reprocessing.

Request No. 7:

A description and a copy of the agreement between FMC and Simplot for the shared use of a drainage ditch from the respective plant properties to the Portneuf River including:

- A. What the ditch was used for.
- B. The length of time it was used by each company.
- C. The types and quantities of wastewater discharged via the ditch.

Response:

- A. Exhibit #17, which is attached hereto and incorporated herein by reference, is copy of the original easement agreement, recorded May 11, 1949, instrument number 67527.

Exhibit #18, which is attached hereto and incorporated herein by reference, is copy of the easement recorded August 1, 1973, instrument number 101967.

- B. Exhibit #19, which is attached hereto and incorporated herein by reference, is a letter dated November 7, 1956 which indicated the "reclaimed Westvaco (now FMC) waste water" flow was estimated to be about 3000 g.p.m. The ditch was used by Simplot for process water and any water left over was used to irrigate 36 acres of farm land adjacent to the plant. Plant expansions utilized water previously used to irrigate farm land.
- C. FMC discontinued use of the ditch on October 26, 1973. Simplot discontinued discharge to the Portneuf river via this ditch on April 1, 1974 by routing a small drainage flow into the water treatment system. Portions of the FMC ditch location on Simplot property are utilized for storm runoff control. This stormwater is not discharged to the Portneuf River. A portion of the FMC ditch serves as an emergency overflow between the east overflow pond and the holding pond, and does not discharge to the Portneuf River.
- D. Exhibit #20, which is attached hereto and incorporated herein by reference, is Simplot wastewater data.

Request No. 8:

A summary of analytical results for all soil and ground-water samples taken on-site by Simplot and maps showing all sample locations.

Response:

- A. Soil Sample Locations and Results. The location and results of soil samples are included with the reports referenced in Response 2E.

- B. Groundwater Sample Locations. Exhibit #1 depicts the location of wells known as #4, #5, #6 & Frontier. Wells known as #1, #2, & #3 were taken out of service many years ago and were plugged with concrete. Exhibit #21, which is attached hereto and incorporated herein by reference, is a copy of Figure 6-4 from EVALUATION OF WASTE MANAGEMENT FOR PHOSPHATE PROCESSING, by PEI Associates for EPA, and depicts the location of wells known as PEI-1, PEI-2, PEI-3, PEI-4, PEI-5, & PEI-6.
- C. Groundwater Analysis Summary. Simplot has utilized many different laboratories for groundwater analysis. These laboratories include but are not limited to Simplot labs, Betz labs, State of Idaho labs, Ford Chemical and USGS.

The most extensive laboratory work has been done by the Ford Chemical laboratory. Ford Chemical data has been compared on split samples with the EPA contract lab utilized in the study conducted by PEI Associates and with the USGS lab. Ford Chemical data is the most complete data set available. Exhibit #22, which is attached hereto and incorporated herein by reference, is a copy of Simplot's computer data base for the Ford Chemical Laboratory data. The Simplot computer data base does not contain all of the historical Ford Chemical Laboratory data.

Request No. 9:

A discussion of individual and corporate histories and relationships between J. R. Simplot, the Simplot-Muir Company, the Ruby Company, Simplot Industries, Inc., the J. R. Simplot Company, the Inland Terminal Warehouse Company, and the Pocatello Corporation including dates of activities, incorporations and acquisitions.

Response:

It is believed that the J. R. Simplot Company corporate history commences February 28, 1946 with the incorporation of J. R. Simplot Processing Company, an Idaho corporation. On March 7, 1946, the name of the Company was changed to J. R. Simplot Company. Early shareholder information with regard to this Company is unavailable. On September 28, 1948, Simplot Investment Company, an Idaho corporation, was formed and it is believed that J. R. Simplot held 34% of the outstanding stock of the Company. On February 24, 1953, the Articles of Incorporation were amended to provide for two classes of stock, Class A and Class B, and upon the cancellation of the old certificates, J. R. Simplot was issued 34% of the Class A stock and 34% of the Class B stock. On March 1, 1952, J. R. Simplot

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Company, an Idaho corporation was merged into Simplot Investment Company, and on March 7, 1952, Simplot Investment Company changed its name to J. R. Simplot Company.

On June 28, 1955, J. R. Simplot Company, a Nevada corporation was formed and on March 1, 1956, J. R. Simplot Company, an Idaho corporation was merged into J. R. Simplot Company, a Nevada corporation which remains the present J. R. Simplot Company.

The Simplot Muir Company was incorporated in the State of Utah on March 2, 1946, changed its name to Ruby Company on April 18, 1950. J. R. Simplot was a 25% shareholder of Ruby Company from March 6, 1946 to March 22, 1951, when his 25% interest was conveyed to Simplot Investment Co., the predecessor of J. R. Simplot Company which at the same time obtained another 25.1% interest in Ruby Company from other parties.

Simplot Investment Co., and its successor J. R. Simplot company remained a shareholder of 50.1% of the voting stock of Ruby Co. until January 25, 1956 when a second class of stock was created and its interest was reduced to 49.9% of the Class A voting stock. J. R. Simplot company remained a shareholder of 49.9% of the voting stock of Simplot Industries, Inc. from that date. In 1978, SI, Inc. a Utah corporation was formed as a wholly owned subsidiary of J. R. Simplot Company (Nevada) and on May 1, 1978, Simplot Industries, Inc. was merged into SII, Inc. and its name changed to Simplot Industries, Inc. Simplot Industries, Inc. was then subsequently merged into J. R. Simplot Company (Nevada) on February 28, 1985.

Pocatello Chemical Corporation, a Delaware corporation was formed on the 10th day of December, 1973. All of the issued and outstanding stock of Pocatello Chemical Corporation was owned by Bessemer Securities Corporation from March 9, 1964 until December of 1969 at which time all of said stock was assigned to Simplot Industries, Inc. Pocatello Chemical Corporation remained a wholly owned subsidiary of Simplot Industries, Inc. until December 21, 1977 when it was merged into Simplot Industries, Inc. as the survivor.

J. R. Simplot was a minority shareholder of J. R. Simplot Company from its incorporation until 1990. Mr. Simplot was originally President of J. R. Simplot Company, and at all times has remained a Director of that corporation. On October 1, 1973, J. R. Simplot became Chairman of the Board of J. R. Simplot Company which position he hold as of this date.

Inland Terminal Warehouse Company (Inland), an Idaho corporation was incorporated January 24, 1947, and was solely owned by Gay S. Otter. In 1985, the assets of Inland Terminal Warehouse Company were sold to Simplot Leasing Corporation, a wholly owned

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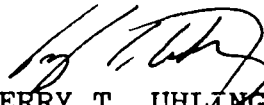
second tier subsidiary of J. R. Simplot Company, and Inland Terminal Warehouse Company was subsequently liquidated. J. R. Simplot was not an officer, director or shareholder of Inland.

The acquisitions at the site by the above corporations are as follows:

All properties at the site which are under the control of J. R. Simplot Company were acquired either directly by J. R. Simplot Company or through Simplot Industries, Inc. (formerly Ruby Company) which was eventually merged into J. R. Simplot Company as the survivor with the exception of two relatively small parcels. A property acquired by Inland Terminal Warehouse company located adjacent to the plant site was used for parking motor vehicles, and a small 10 acre site within the plant site was conveyed to Pocatello Chemical Corporation on which a portion of a chemical plant was constructed, financed and leased to J. R. Simplot Company for operation until the construction was completed and paid for. At which time Simplot Industries, Inc. acquired all of the outstanding stock of Pocatello Chemical Corporation and Pocatello Chemical Corporation was eventually merged into Simplot Industries, Inc.

If you need to discuss any aspects of the Simplot response or need further information from Simplot please feel free to contact Terry T. Uhling, P.O. Box 912, Pocatello, Idaho, 83202, telephone No. (208) 238-2801. Thank you for your cooperation and assistance in this matter.

Sincerely yours,


TERRY T. UHLING
Assistant General Counsel

TTU/nj
Enc.
C:\PROJ\EPA2.let

c: Ron Graves

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CERTIFICATE OF MAILING

I HEREBY CERTIFY that a true, correct and complete copy of the foregoing document was mailed on this 31st day of January, 1991, postage prepaid, to the following:

Dean Nygard
IDAHO DEPT. OF HEALTH & WELFARE
Dept. of Environmental Quality
1410 N. Hilton
Boise, ID 83720

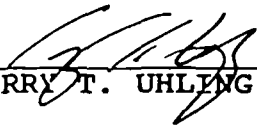

TERRY T. UHLING

TABLE OF CONTENTS
RESPONSE TO REQUEST FOR INFORMATION
EASTERN MICHAUD SUPERFUND SITE - EXHIBITS

- Exhibit #1** - Map which depicts the Gypsum Decant Pond.
- Exhibit #2** - Copy of a study conducted by Dames & Moore for Simplot, titled PERMEABILITY OF SOILS AND MINERALOGICAL INVESTIGATION OF "SIMCRETE" FOR J.R. SIMPLOT COMPANY, POCATELLO, IDAHO.
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PERMEABILITY OF SOILS AND MINERALOGICAL
INVESTIGATION OF "SIMCRETE" FOR
J. R. SIMPLOT COMPANY, POCA TELLO, IDAHO

Dames & Moore Job No. 4048-024-06

PERMEABILITY OF SOILS
AND
MINERALOGICAL INVESTIGATION OF "SIMCRETE"

INTRODUCTION

Observations made during preparation of the Environmental Analysis Record indicated that when gypsum slurry from the J. R. Simplot Company phosphate fertilizer plant interacted with the native silt loess soil underlying the gypsum storage area, a chemical reaction occurred which greatly reduced permeability of the soil. In addition, at the soil-gypsum interface, an indurated material, informally designated "Simcrete," was formed. This report presents the results of investigations designed to provide further insight into these reactions and their significance in relation to inhibiting potential seepage from the gypsum storage area.

The investigations reported here are the results of the modified scope of work outlined in our proposal of September 18, 1975, "Analysis and Identification Study of 'Simcrete' Substance." The scope of work authorized by Mr. Jack Smith, J. R. Simplot Company, during telephone conversations with Dr. Peter Olsen of Dames & Moore during November, 1975, consisted of conducting a series of five laboratory permeability tests utilizing native silt loess soils and water from the gypsum tailings slurry as well as optical examination of thin sections of the Simcrete substance to determine the nature of the cementing material.

MINERALOGICAL INVESTIGATION OF SIMCRETE

Samples of the indurated material collected by personnel of the J. R. Simplot Company in November, 1975, were submitted to Professor William T. Parry, Department of Geology and Geophysics, University of Utah for examination. Two types of samples were examined. One consisted of older material taken from a stratum approximately one foot in thickness located about 50 feet below the surface of the abandoned gypsum storage area. The other sample was younger material taken at the gypsum-soil interface near the leading edge of the active gypsum storage area; at this site the gypsum covered the soil surface to a depth of only 2 to 5 feet and had been in place for about 6 months.

Optical examination of petrographic thin-sections made of the samples revealed the presence of two distinct types of secondary material which decrease porosity and permeability and increase cohesive strength. The first, noted in the older Simcrete, is isotropic and has a refractive index below 1.54. The second, observed in the younger material, is anisotropic, is composed of radiating crystals with refractive indices below 1.54 and has low birefringence, and parallel extinction under polarized light. Neither of these materials could be identified as to chemical species within the scope of work authorized.

The complete report of Professor Parry's optical investigation, including photomicrographs, is included in the appendix.

Samples of the older Simcrete as well as a sample of the native silt loess soil had previously been supplied to Dr. Parry for comparative

X-ray diffraction and X-ray emission studies. These studies were not conclusive other than to note that while quartz, calcite and dolomite were present in the native soil, calcite and dolomite were absent in the Simcrete, and that the latter contained an additional component which could not be identified. In addition, it was determined that the Simcrete contained more sulphur, phosphorous and calcium and less aluminum than the silt loess soil. Dr. Parry's complete letter report is contained in the appendix.

Air permeability tests were performed by Core Laboratories, Dallas, Texas, on four cores of older Simcrete. Porosities of the various samples were found to be 16.0, 29.7, 36.0, and 36.3 percent. Respective vertical permeabilities in millidarcys were 1.7, 2.7, 104 and 25, corresponding to vertical permeabilities to water of 1.5, 2.4, 93 and 22 feet/year.

PERMEABILITY

METHODS:

Soil samples were taken using thin wall samplers from the top six inches of soil at five locations during November, 1975 by J. R. Simplot Company personnel. Locations of the samples are shown on Plate 1. All sample sites were at locations which will eventually be covered by gypsum.

Permeability tests were performed in the Salt Lake City Dames & Moore laboratory as described in Plate 2, "Method of Performing Percolation tests," under a confining pressure of 100 pounds per square foot. All samples were disturbed during sampling and had to be recompacted. A two-inch long core from each sample was selected for the actual permeability tests.

Two of the soil samples ("A" and "B") were subjected to permeability testing utilizing tap water for six days followed by 14 days of testing utilizing water from the gypsum slurry.

Three of the soil samples ("C," "D" and "E") were tested for 15 days utilizing only water from the gypsum slurry.

Data on the results of permeability testing of another sample ("F") are also included. This testing was performed in August 1975 and provided the basis for the observation that the gypsum slurry water reacted chemically with the native silt loess soil resulting in greatly reduced permeability. Sample "F" was taken at a depth of six feet from a boring ("D3") completed November 2, 1974 in conjunction with a job previously performed for the J. R. Simplot Company (Dames & Moore Job 4048-020-06, dated December 22, 1974). Permeability of the sample was tested for 13 days utilizing gypsum slurry water only.

In addition to the permeability tests, the pH of the gypsum slurry water was determined before application to the soil samples. A sample of the same water collected after percolation through Samples "C," "D" and "E" was also analyzed for pH. Mechanical and hydrometer analysis of Sample "A" for textural classification was also made.

RESULTS:

The results of the permeability tests are shown in Tables 1 through 6.

Samples "A" and "B" yielded permeability values with tap water of about 65 and 140 ft/year, respectively. Within approximately 5 hours of

changing to gypsum slurry water, permeability had decreased to about 20 and 9 feet/year, respectively. In less than one week, permeability rates of both samples were less than one foot/year. At the end of the 14 day test period both samples showed permeability rates of about 0.85 feet/year.

The initial permeability rates of the other three soil samples ("C," "D" and "E") tested only with gypsum slurry water averaged about 45, 85 and 250 feet/year, respectively. (Sample "C" was severely disturbed by sampling; this may be responsible for the low initial permeability value). Within 24 hours, these samples showed permeability rates of about 3, 10 and 4 feet/year. By the end of the 15 day test period, permeability rates of the 3 samples ranged from 1.2 to 1.5 feet/year.

Initial permeability rates of the subsurface sample ("F") averaged about 215 feet/year. This decreased to about 9 feet/year within 24 hours and by the end of the 13 day test period, permeability was less than 0.5 feet/year.

The initial pH of the gypsum slurry water used in these tests was 1.7. Following percolation through soil samples "C," "D" and "E" a composite sample showed a pH of 3.6.

Mechanical analysis of sample "A" for particle size revealed 85.2% passing a No. 200 U. S. Standard Sieve (0.075 mm). Hydrometer analysis showed the following particle size distribution for the total sample: Sand (> 0.05 mm), 39.5 percent; Silt (0.05-0.002 mm), 49.2 percent; Clay (< 0.002 mm), 11.3 percent.

DISCUSSION

These investigations have verified that the gypsum slurry reacts chemically with the native silt loess soils underlying the operating gypsum

storage area to significantly reduce permeability. The original permeabilities of these soils were about 50 to 250 feet per year. These were reduced through reaction with the percolation of the slurry water to about one foot, per year or less. This represents a reduction in permeability of 97 to 99 percent.

Permeabilities of this order are generally quite acceptable for clay or bentonite liners constructed for industrial waste ponds and for sewage lagoons. The Utah Code of Waste Disposal Regulations allow a maximum seepage through the bottoms of sewage lagoons of 0.25 inches per day or 7.6 feet per year. The Idaho Department of Environmental and Community Services (personal communication, January 5, 1976) has used this same figure for a number of years but now considers additional factors in determining allowable seepage in a given case.

Formation of the Simcrete substance did not occur under the laboratory conditions of testing during the short term of the tests. However, the samples, when examined following the tests, showed positive indications that such induration was commencing with definite cementation having taken place, particularly in the upper portion of the samples.

The cementing material which is formed and which contributed to the decreased permeability could not be chemically identified although two definite types were differentiated by optical examination. The chemical reaction producing Simcrete is unknown but involves a change from a calcareous to non-calcareous state with replacement of calcite and dolomite. The cementing substances are probably compounds of calcium, phosphate and/or sulfate possibly containing iron and magnesium.

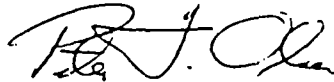
Whatever the chemical nature of the soil-gypsum slurry reaction may be, the practical significance is that, in essence, a liner of very low permeability is created under the storage area in a short period of time, wherever this reaction occurs. This reaction, with its reduced permeability, may be expected to occur wherever similar reactive soil underlies the gypsum storage area.

Respectfully submitted,

DAMES & MOORE



Richard Chojnacki
Associate



Peter F. Olsen
Project Manager

RC/PFO:ab

TABLE 1 PERMEABILITY RATES - SOIL SAMPLE "A"

Wet Density

Before Test 98.1 lbs/cu ft
After Test 111.1 lbs/cu ft

Moisture Content

Before Test 13.2%
After Test 28.1%

Dry Density

After Test 86.7 lbs/cu ft

Water Source	Elapsed Time		Observation Time (Minutes)	Number of Observations	Permeability In Ft/Yr	
	Days	Minutes			Range	Mean
Tap Water	0		118	3	76.7-85.5	79.9
"	2		45	9	54.4-89.4	70.0
"	5		25	5	62.2-77.8	68.4
"	6		49	11	58.3-68.0	62.3
<hr/>						
Gypsum Slurry		15		1		58.3
"		53		1		55.2
"		70		1		52.6
"		82		1		43.7
"		113		1		33.8
"		125		1		43.7
"		235		1		28.1
"		315		1		19.7
"	1		538	12	4.6-13.9	7.2
"	2		476	4	5.2-11.7	6.6
"	3		1489	5	3.4- 4.2	4.0
"	4		349	3	0.49- 3.1	1.7
"	7		541	3	0.07- 0.27	0.13
"	8		1431	3	1.1- 1.3	1.3
"	9		1241	2	1.2- 1.3	1.2
"	10		1626	2	0.89- 0.95	0.93
"	11		1265	2	0.55- 0.97	0.86
"	14		4235	2	0.82- 0.85	0.85

TABLE 2 PERMEABILITY RATES - SOIL SAMPLE "B"

Wet Density

Before Test 98.1 lbs/cu ft
After Test 114.1 lbs/cu ft

Moisture Content

Before Test 11.6%
After Test 28.7%

Dry Density

After Test 88.6 lbs/cu ft

Water Source	Elapsed Time		Observation	Number of Observations	Permeability In Ft/Yr	
	Days	Minutes	Time (Minutes)		Range	Mean
Tap Water	0		81	3	289.7-408.7	352.5
"	2		45	9	116.6-182.7	144.7
"	3		25	5	116.6-186.6	147.0
"	6		49	11	132.2-145.8	137.6

Gypsum Slurry		15		1		114.0
"		53		1		115.1
"		90		1		33.6
"		102		1		50.2
"		133		1		29.4
"		145		1		22.7
"		250		1		10.0
"		333		1		9.1
"	1		477	12	1.2- 11.0	4.7
"	2		476	5	2.1- 7.0	3.7
"	3		1489	5	1.9- 2.6	2.5
"	4		1273	4	0.46- 2.1	2.0
"	7		4323	4	0.02- 1.3	1.4
"	8		1429	3	0.50- 1.2	1.1
"	9		1241	2	0.50- 1.0	0.63
"	10		1626	2	0.77- 0.87	0.80
"	11		1470	2	0.25- 1.0	0.75
"	14		4235	2	0.69- 0.95	0.84

TABLE 3 PERMEABILITY RATES - SOIL SAMPLE "C"

Wet Density		Moisture Content	
Before Test	97.6 lbs/cu ft	Before Test	11.3%
After Test	113.3 lbs/cu ft	After Test	29.2%
Dry Density			
After Test	87.7 lbs/cu ft		

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability In Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	442	33	0-51.8	7.8
"	1	1675	5	1.3- 7.0	2.6
"	4	660	3	2.9- 5.2	3.4
"	5	1380	1	2.1	2.1
"	6	1456	2	1.3- 1.7	1.6
"	7	300	1	2.9	2.9
"	11	4843	4	1.2- 2.2	2.2
"	12	1410	3	1.2- 1.6	1.3
"	13	1073	1	1.3	1.3
"	15	3101	2	1.2- 2.4	1.3

TABLE 4 PERMEABILITY RATES - SOIL SAMPLE "D"

Wet Density

Before Test 98.5 lbs/cu ft

After Test 109.5 lbs/cu ft

Moisture Content

Before Test 13.2%

After Test 25.4%

Dry Density

After Test 87.0 lbs/cu ft

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability in Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	189	34	38.9-103.7	63.2
"	1	1470	4	5.1- 10.1	8.6
"	4	660	3	4.5- 6.3	5.2
"	5	1380	1	2.7	2.7
"	6	887	1	1.8	1.8
"	7	1430	2	2.2- 3.1	2.9
"	8	919	1	1.9	1.9
"	11	460	3	2.8- 3.3	3.0
"	12	1410	3	1.3- 2.2	2.0
"	13	1073	1	1.4	1.4
"	15	3101	2	0.97- 3.8	1.2

TABLE 5 PERMEABILITY RATES - SOIL SAMPLE "E"

Wet Density

Before Test 89.7 lbs/cu ft

After Test 105.6 lbs/cu ft

Moisture Content

Before Test 12.2%

After Test 32.1%

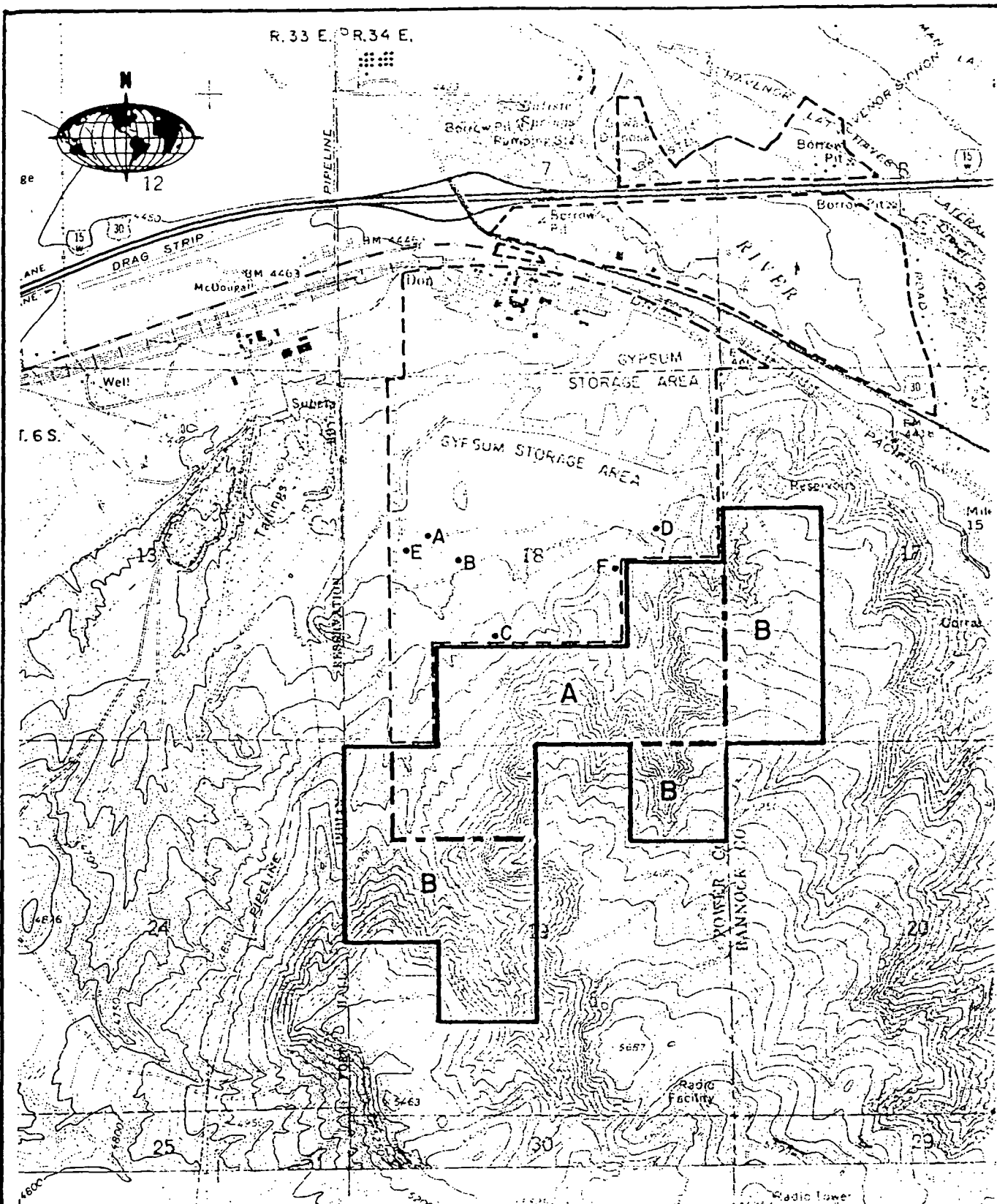
Dry Density

After Test 80.0 lbs/cu ft

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability In Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	171	31	71.3-259.2	122.0
"	1	755	3	4.0- 7.6	4.9
"	4	660	3	1.5- 2.7	2.4
"	5	1380	1	2.2	2.2
"	6	1425	2	2.2- 2.4	2.3
"	7	300	1	1.2	1.2
"	8	919	1	2.2	2.2
"	11	460	3	0.86- 1.7	1.2
"	12	1410	3	1.6- 1.9	1.8
"	13	1073	1	1.7	1.7
"	15	3101	2	0.50- 1.6	1.5

TABLE 6 PERMEABILITY RATES - SOIL SAMPLE "F"

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability in Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum	0	36	3	168.5-231.2	215.4
Slurry	1	500	2	8.7- 37.3	10.8
"	4	4045	2	0.51- 0.07	0.10
"	5	1660	4	0.14- 2.8	2.0
"	6	927	2	0.00- 0.13	0.06
"	7	1502	2	0.00	0.00
"	8	930	1	0.44	0.44
"	11	4875	1	0.46	0.46
"	12	1120	2	0.07- 0.23	0.10
"	13	1100	1	0.42	0.42



REFERENCE

TOPOGRAPHIC BASE MAP
U.S.G.S. QUADRANGLE MAP
TITLED MICHAUD, IDAHO 1971

KEY

- BOUNDARY OF SELECTED LANDS
- - - BOUNDARY BETWEEN PRIORITY "A" AND PRIORITY "B" SELECTED LANDS
- - - BOUNDARY OF J.R. SIMPLOT CO. LAND
- A SOIL SAMPLE LOCATIONS

SITE MAP SHOWING SOIL SAMPLE LOCATIONS



DAMES & MOORE

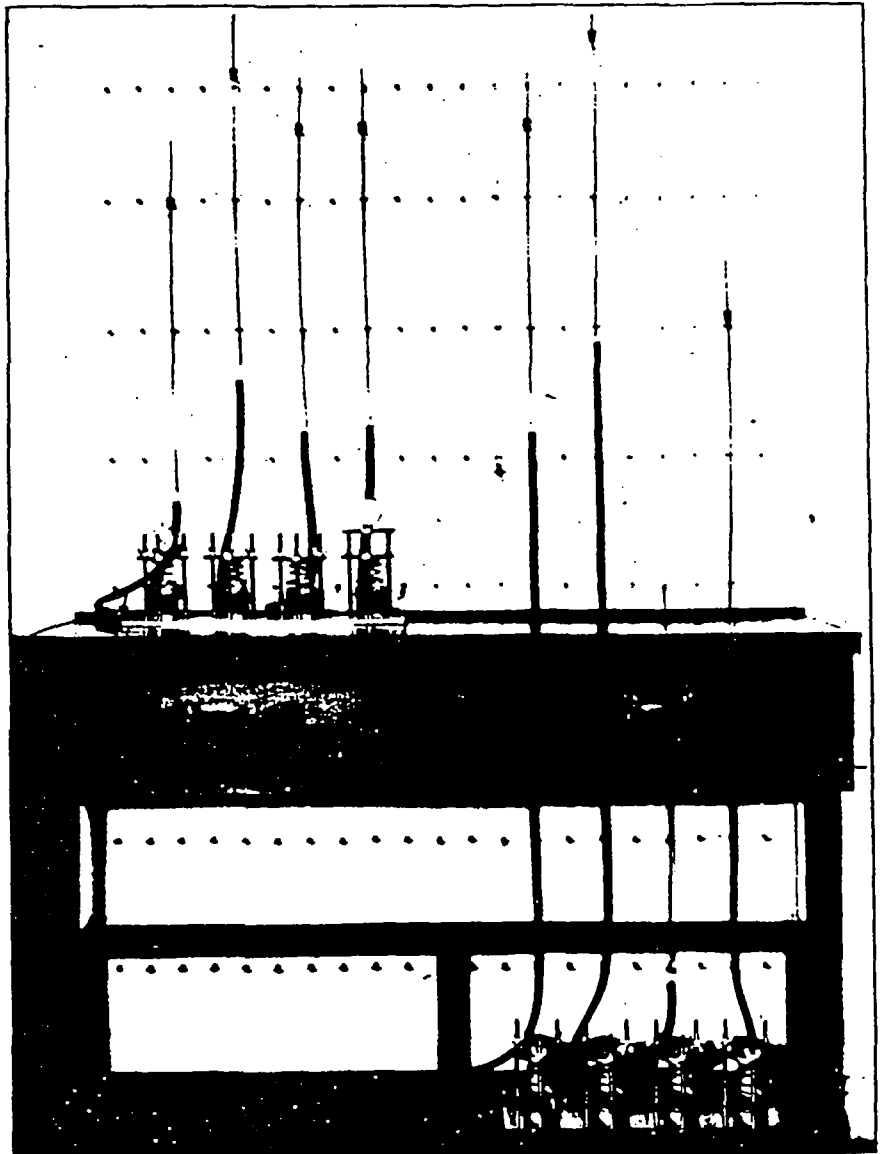
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The quantity and the velocity of flow of water which will escape through an earth structure or percolate through soil are dependent upon the permeability of the earth structure or soil. The permeability of soil has often been calculated by empirical formulas but is best determined by laboratory tests, especially in the case of compacted soils.

A one-inch length of the core sample is sealed in the percolation apparatus, placed under a confining load, or surcharge pressure, and subjected to the pressure of a known head of water. The percolation rate is computed from the measurements of the volume of water which flows through the sample in a series of time intervals. These rates are usually expressed as the velocity of flow in feet per year under a hydraulic gradient of one and at

a temperature of 20 degrees Centigrade. The rate so expressed may be adjusted for any set of conditions involving the same soil by employing established physical laws. Generally, the percolation rate varies over a wide range at the beginning of the test and gradually approaches equilibrium as the test progresses.

During the performance of the test, continuous readings of the deflection of the sample are taken by means of micrometer dial gauges. The amount of compression or expansion, expressed as a percentage of the original length of the sample, is a valuable indication of the compression of the soil which will occur under the action of load or the expansion of the soil as saturation takes place.



APPARATUS FOR PERFORMING PERCOLATIONS TESTS

Shows tests in progress on eight samples simultaneously.

METHOD OF PERFORMING PERCOLATION TESTS

THE UNIVERSITY OF UTAH
COLLEGE OF MINES AND MINERAL INDUSTRIES
SALT LAKE CITY 84112

DEPARTMENT OF GEOLOGY
AND GEOPHYSICS

717 MINERAL SCIENCE BUILDING

December 9, 1975

Dr. Peter F. Olsen
Project Ecologist
Dames and Moore
Suite 200
250 East Broadway
Salt Lake City, Utah 84111

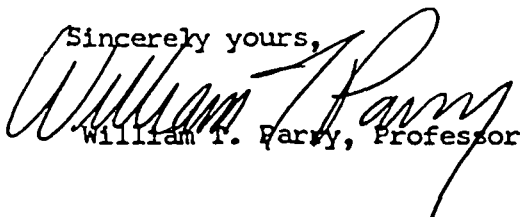
Dear Dr. Olsen:

Enclosed is a report of our optical investigation of "simcrete" samples. We have found two distinct types of secondary material which would decrease porosity and permeability and increase cohesive strength. The first, shown in photographs 1, 2, 3, and 4, is isotropic and has a refractive index below 1.54. The second, shown in photographs 5, 6, and 7, is anisotropic radiating crystals with refractive indices below 1.54, low birefringence, and parallel extinction. Neither of these materials could be identified as to chemical species with current information.

Further studies should include microprobe determination of the composition of each phase and an x-ray diffraction study of each phase.

Thank you for the opportunity to be of service.

Sincerely yours,


William T. Parry, Professor

Report On The Optical Investigation

The samples of old and young 'simcrete' were examined under a low power binocular microscope to determine the appearance of the cementing material. Two types of secondary material were identified. Some of the old 'simcrete' had discontinuous, parallel partings which contained a vitreous coating. These partings were well developed in a number of samples but in general, both the old and young 'simcrete' is dense and without the partings. Both old and young 'simcrete' had small, soft, white spots of material that appeared secondary in nature.

Four samples were chosen for their good development of the two unknown materials. These were cut into slices and cemented to glass slides. The cemented slices were then polished to a thickness of about 0.03mm, and a cover glass epoxied to each mount.

These petrographic slides were examined and photographed under plane polarized light. The following photographs and their accompanying explanations demonstrate the maximum amount of information that can economically be obtained from this material by optical methods.



Photo 1

Two open partings, partially filled with an isotropic, high relief, low RI, crystalline material that's apparently a cement. The detrital grains are quartz and feldspar with a brown matrix of clay and organic material. The cement completely fills the parting in the upper right corner of the frame. The sample is of the old simcrete. The bar scale represents 0.5mm. The box encloses the field of photo 2.



Photo 2

A close-up of photo 1. The unknown material stands out in high relief against the epoxy filled parting. The obvious crystalline nature is readily apparent. The circular feature in the upper left corner is a bubble in the epoxy. The bar scale represents 0.1mm.

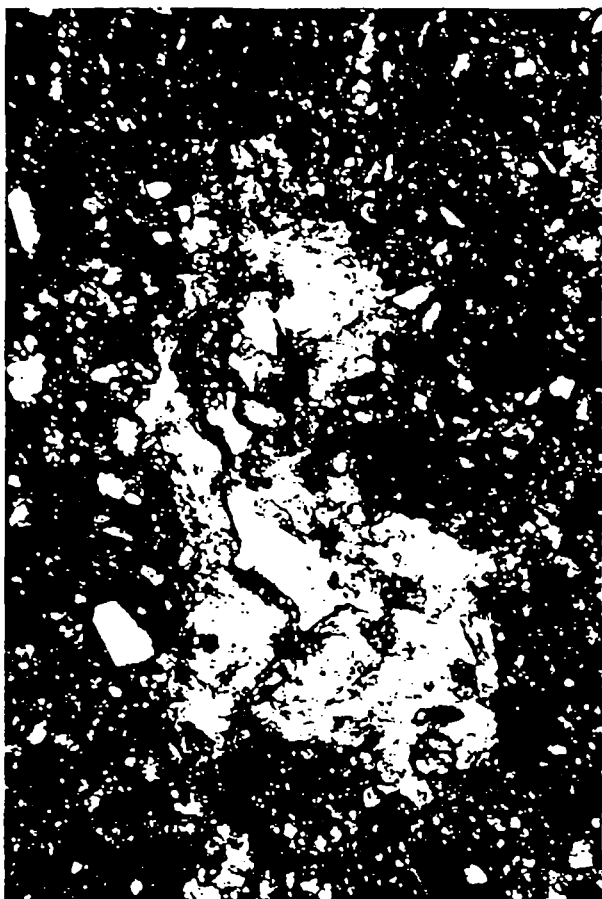


Photo 3

A void, nearly filled with the cementing material. The angular boundary of the cement with the central part of the cavity may indicate the maximum growth of the crystalline cement. This might demonstrate the reduction of the primary porosity by the cement. The bar scale represents 0.5mm.

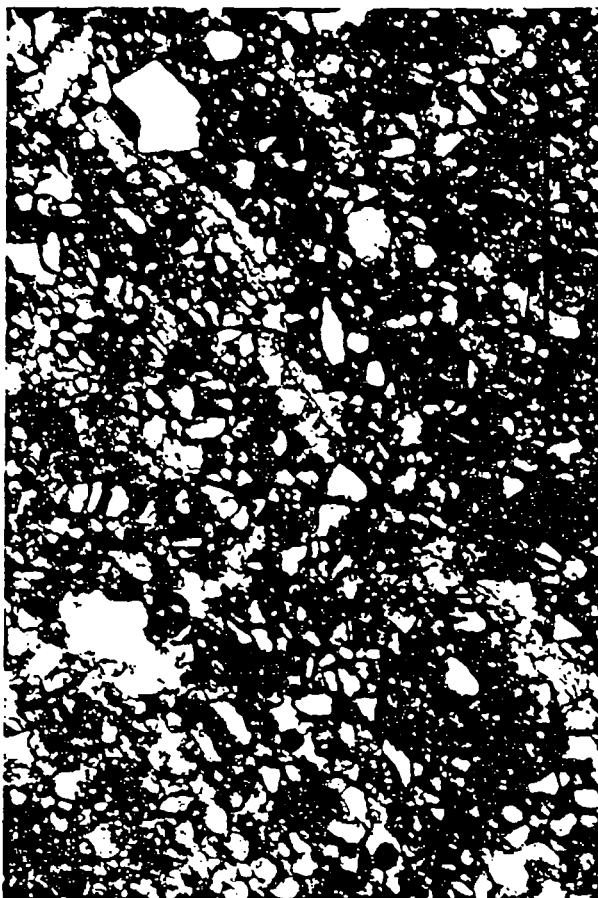


Photo 4

A parting, completely filled with the unknown material runs diagonally across the frame. A dark, linear feature seems to bisect the parting lengthwise, and may be due to the growth of the cement crystals from either side of the parting. The sample is of the old 'simcrete'. The bar scale represents 0.5mm.

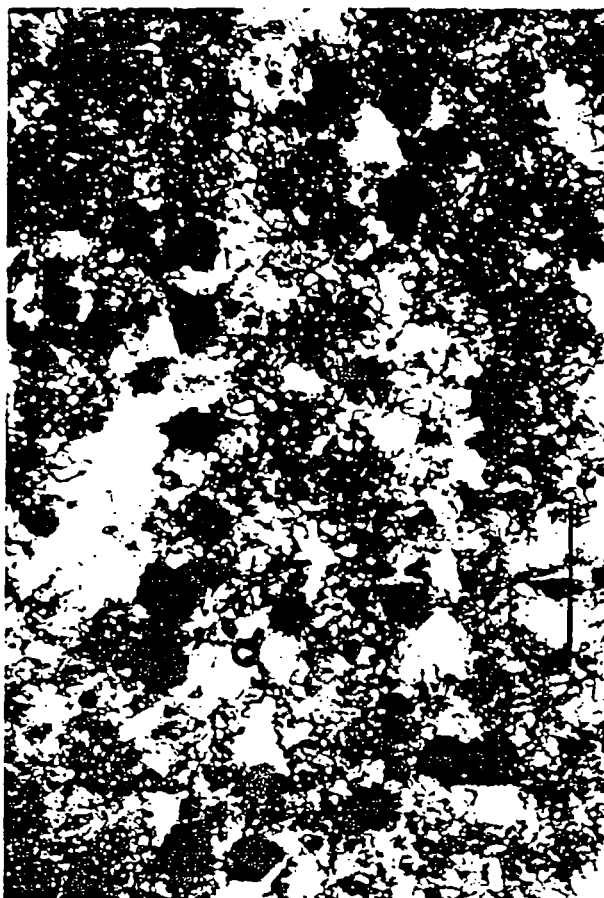


Photo 5

A low magnification frame of a sample of the younger 'simcrete'. The high apparent porosity is due to the plucking of this soft rock in polishing. The previously mentioned cement is present plus another unknown material which occurs as dark spots in this frame. In the hand specimens, these spots are white and very soft. These spots are also visible in the old 'simcrete'. The bar scale represents 0.5mm.



Photo 6

A higher magnification view of part of frame 5. The spots are seen as radiating, crystalline material. The radiating crystals have high relief, low RI, low birefringence, and parallel extinction. All of the spots are mantled by a dark amorphous material. Note that the crystals seem to mantle the detrital grains with no apparent interaction. The bar scale represents 0.1mm.

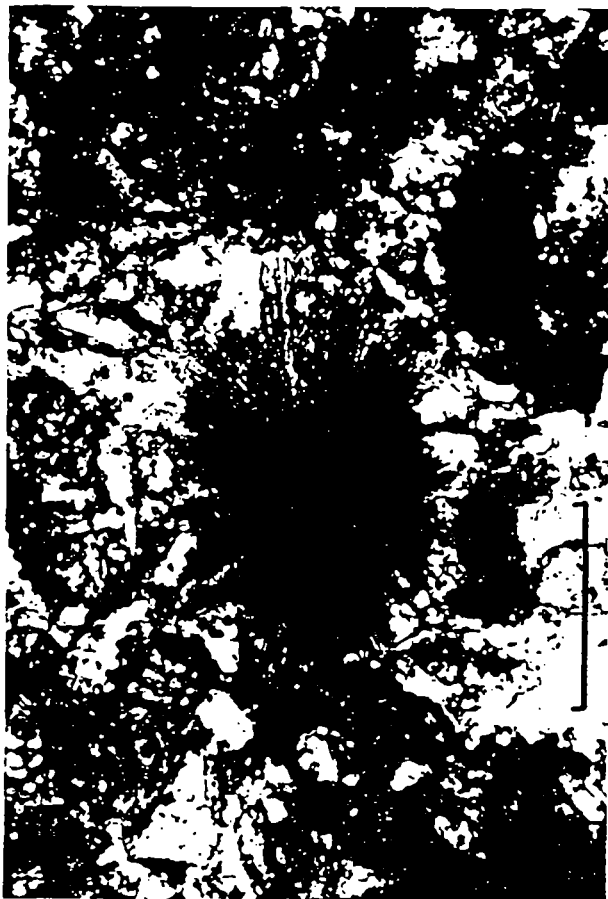


Photo 7

A high magnification view of one of the spots, showing the lack of reaction between the radiating crystals and the detrital grains. The very fine fabric of the spots and their mantling amorphous covering prevents further optical investigation of this still unknown material. The bar scale represents 0.1mm.

P-4

ATTACHMENT 4

**HUNDRED FOLD REDUCTION IN PERMEABILITY
UNDER A GYPSUM STACK**

by

-407-

**J. F. COCHRANE
J. R. Simplot Company
Pocatello, Idaho**

HUNDRED FOLD REDUCTION IN PERMEABILITY UNDER A GYPSUM STACK

SUMMARY:

Laboratory investigations have verified field observations that gypsum slurry water reacts chemically with native silt loess soils underlying an operating gypsum storage area to significantly reduce permeability. The original soil permeabilities were about 50 to 250 feet per year. These were reduced through reaction between the soil and the percolating gypsum slurry water to about one foot per year or less during a 15-day test. The soil at the gypsum storage area in Southeastern Idaho is a calcareous silt loess and ranges in depth from a few feet to in excess of 60 feet.

The chemical species causing the reduced permeability were not positively identified. Optical examination of field samples revealed the presence of two distinct types of secondary material which decreased porosity and permeability and increased cohesive strength. Comparative studies of the native silt loess soil and the resulting soil after treatment with gypsum slurry water were conducted by X-ray diffraction and X-ray emission. These studies indicated the presence of quartz, calcite and dolomite in the native soils; calcite and dolomite were absent in the treated soil. In addition, the treated soil contained an additional component which was not identified. The treated soil contained more sulfur, phosphorus, calcium and less aluminum than the native soil. To the extent that these reactions occur at various gypsum storage sites, they should contribute significantly to the minimization of seepage rates.

BACKGROUND:

The J. R. Simplot Company has operated a phosphate fertilizer complex in Southeastern Idaho near Pocatello for approximately 34 years. Gypsum has been produced as a byproduct of wet process phosphoric acid (WPA) production for 27 years. The original gypsum storage area was abandoned in 1966. A new gypsum disposal area was constructed on a 100-foot high bench South of the plant. Because of the distance and elevation involved to reach the new storage area, it was decided to install gypsum thickeners to concentrate the material to about 35 to 40 weight percent solids before pumping the material to the storage area. The new gypsum storage area receives a small volume of water in comparison to conventional gypsum storage areas which do not use a thickener. Nevertheless, it was noticed by plant personnel that water tended to accumulate in a relatively short time after gypsum was pumped onto previously uncovered soil.

Observations by personnel from a consulting engineering firm during preparation of an Environmental Analysis Record confirmed observations by plant personnel that gypsum slurry water reacted with the native soil to greatly reduce permeability. Subsequent to this the consulting firm was hired to perform laboratory studies for the purpose of determining if the observed reduction in permeability could be reproduced in the laboratory and if the mechanism and chemistry causing the reduced permeability could be identified.

The byproduct gypsum is a di-hydrated calcium sulfate produced by reacting sulfuric acid with ground phosphate ore to produce phosphoric acid. The phosphoric acid is separated and used to make various grades of phosphate fertilizers. Approximately five tons of gypsum is produced for each ton of phosphate (P_2O_5) produced by the WPA plant. In the storage pile, the gypsum exhibits bands and layers of different coloration, alternating generally from light gray to dark gray. The darker layers result from organic impurities in the phosphate ore, but do not produce any measurable difference in the engineering properties of the gypsum. This layered structure results in a highly anisotropic permeability; that is, the permeability in the horizontal direction is many times greater than that in the vertical direction. Chemically, the gypsum tailings are composed of calcium sulfate ($CaSO_4 \cdot 2H_2O$) with various impurities. Chemical analyses of the solid and liquid fractions will vary on a daily basis. The composition of a one-day composite for the two fractions is shown in Table 1.

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The general soil cover in this area is described as calcareous silt. This soil, having been deposited by wind, is commonly characterized as loess or silt loess. The soil ranges in depth from a few feet to in excess of 60 feet at the gypsum storage area as determined by previous field investigations. Hydrometer analysis of a soil sample showed the following particle size distribution for the total sample: sand (greater than 0.05 mm), 39.5%; silt (0.05-0.002 mm), 49.2%; clay (less than 0.002 mm), 11.3%.

Wind blown soils of this type are found in portions of most of the Midwestern and Northwestern states; beginning near the Great Lakes and extending to Washington and Oregon.

LABORATORY INVESTIGATION:

Soil samples were taken using thin wall samplers from the top six inches of soil at five locations. All of these locations will eventually be covered by by-product gypsum. All samples were disturbed during sampling and had to be recompactd. A two-inch long core from each sample was selected for the actual permeability tests. The permeability tests were performed under a confining pressure of 100 pounds per square foot.

Two of the soil samples were subjected to permeability tests utilizing tap water for six days followed by 14 days of testing utilizing water from the gypsum slurry. Three of the soil samples were tested for 15 days utilizing only water from the gypsum slurry. Permeability of another sample taken at a depth of six feet was tested for 13 days utilizing only water from the gypsum slurry.

Two samples of soil located under the gypsum storage area were collected for optical and X-ray examination. Optical examination of thin sections made from the samples was done to measure refractive index, etc., and to make photomicrographs. Samples of the native silt loess soil and treated samples were compared by X-ray diffraction and X-ray emission studies.

RESULTS:

Results of the permeability tests are shown in Tables 2 through 7. The change in soil permeability is especially dramatic for samples "A" and "B" because these samples were first tested with tap water and then tested with water from the gypsum slurry. The initial permeability of the samples was about 80 and 350 feet per year respectively. After exposure to tap water for six days the permeability had decreased to 62 and 140 feet per year respectively. After exposure to water from the gypsum slurry for one day, the permeability had decreased to seven and five feet per year respectively. Permeability of both samples decreased to less than one foot per year before completion of the 14-day exposure to water from the gypsum slurry.

It was noted that sample "E" shows the greatest permeability (1.5 feet per year) and also the lowest density before and after the tests. This suggests that this particular sample may not have been recompactd as much as the other soil samples. In any event, the results are consistent with field experience which indicates that a soil with greater density will have a lower permeability.

The optical investigation of the treated samples indicated two distinct types of secondary material had formed that would decrease the porosity and permeability and increase the cohesive strength. The chemical species of these materials was not identified. The first chemical specie is isotropic and has a refractive index below 1.54. The second chemical specie is anisotropic radiating crystals with a refractive index below 1.54; the crystals exhibit bi-refringence and parallel extinction. The photomicrographs show the first chemical specie to be of obvious crystalline nature. This material was observed to partially or completely fill voids in the original soil. This crystalline material was observed in an older soil material taken from a stratum approximately one foot in thickness located about 50 feet below the surface of the abandoned gypsum storage area. A younger material taken at the gypsum-soil interface where gypsum had been in place for about six months and covered the soil to a depth of only two to five feet did not contain the above mentioned crystalline material. It did, however, contain a second chemical specie. This second material was observed to consist of radiating crystals having high relief, a low refractive index, low bi-refringence, and parallel extinction. This material showed no apparent interaction with the adjacent soil particles. These crystals had grown to a size in excess of 100 microns. This chemical specie would be expected to reduce porosity but not create the cementing action observed by the first chemical specie.

--411-

The initial pH of the water from the gypsum slurry used in these permeability tests was 1.7. Following percolation, through soil samples, a composite sample showed a pH of 3.6.

Neutralization of the water from the gypsum slurry with calcium precipitates a large percentage of the soluble fluoride and silica at a final pH of 3.6.

The unidentified compounds which cause soil cementing and reduced permeability resulted in the material being referred to as "Simcrete" in reference to Simplot concrete. Formation of the "Simcrete" substance did not occur under the laboratory conditions of testing during the short-term permeability tests. However, these samples, when examined following the tests, showed positive indications that such induration was commencing with definite cementation having taken place in the upper portion of the samples. The chemical reaction or reactions producing "Simcrete" is unknown at the present time, but involves a change from a calcareous to non-calcareous state

with replacement of calcite and dolomite. The cementing substances are probably compounds of calcium phosphate, sulfate, and/or fluoride and possibly containing iron and magnesium. The X-ray diffraction and X-ray emission studies indicate the presence of quartz, calcite and dolomite in the native soil; calcite and dolomite were absent in the "Simcrete". In addition, it was determined that the "Simcrete" contained more sulfur, phosphorus, and calcium and less aluminum than the silt loess soil. The older "Simcrete" sample showed components which were not present in the native soil. These components had X-ray diffraction d-spacings of 9.61, 5.91, 5.07, 4.19, 3.23, 2.83, 2.72, 2.56, 2.34, and 2.18 angstrom units.

CONCLUSION:

The practical significance of the soil-gypsum slurry water reaction is that a liner of very low permeability is created under the gypsum storage area in a short period of time, wherever this reaction occurs. This reaction, with its reduced permeability, may be expected to occur wherever similar reactive soil underlies the gypsum storage area. Hydraulic studies in the laboratory showed that soil having original permeabilities of 50 to 250 feet per year were reduced by the unidentified chemical reactions to permeabilities ranging from .85 to 1.5 feet per year within 15 days. The laboratory soils tested for permeability were also measured for density. Those samples which had the greatest density showed the lowest permeability.

A cementing action was noted on the surface of these samples during the laboratory testing.

The X-ray studies indicated the presence of quartz, calcite, and dolomite in the native soil. The soil samples which had been exposed to water from the gypsum slurry did not contain calcite or dolomite. The optical examination revealed the presence of two yet unidentified crystalline materials. One of the crystalline materials did not fully occupy voids in the soil because of the radial characteristic of the crystalline material. The second compound appeared to be attached to the soil matrix and progressively grew into the void in a solid mass until, in some cases, the void was entirely filled with the crystalline material. In summary, although the chemical reactions remain unknown at the present time, the soil-gypsum slurry water reaction has been shown to reduce soil permeability in both field and laboratory conditions by amounts ranging from 97 to 99% in about two weeks of exposure.

TABLE 1

CHEMICAL CHARACTERISTICS OF SOLID AND LIQUID FRACTIONS
OF GYPSUM SLURRY

(Daily composite sample taken from influent to operating gypsum
storage area at J. R. Simplot Company plant)

<u>Constituent</u>	<u>Solids (%)</u>	<u>Liquid (mg/l)</u>
Sulfate as SO ₄	53.500	3020.0
Calcium as Ca	20.350	320.0
Silicon Dioxide	7.150	133.30
Phosphoric acid as P ₂ O ₅	1.450	4800.0
Aluminum as Al	0.985	175.70
Sodium as Na	0.745	27.63
Fluoride as F	0.560	3200.0
Strontium as Sr	0.025	ND
Iron as Fe	0.025	6.898
Magnesium as Mg	0.015	360.0
 Zinc as Zn	 0.006	 15.0
Chromium as Cr	0.004	0.703
Manganese as Mn	0.004	4.943
Vanadium as V	0.003	17.231
Copper as Cu	0.002	3.862
Cadmium as Cd	0.001	1.585
Lead as Pb	0.001	0.174
Uranium as U	< 0.001	1.350
Molybdenum as Mo	0.000	0.328
Antimony as Sb	0.000	0.30
 Selenium as Se	 0.000	 0.260
Silver as Ag	0.000	0.029
Arsenic as As	0.000	0.013
Mercury as Hg	0.000	0.005
Cyanide as Cn	0.000	< 0.01
Water of Hydration	18.170	-
 Total	 102.996	 12089.311

-41-

TABLE 2

PERMEABILITY RATES - SOIL SAMPLE "A"

Wet Density

Before Test 98.1 lbs/cu ft
After Test 111.1 lbs/cu ft

Moisture Content

Before Test 13.2%
After Test 28.1%

Dry Density

After Test 86.7 lbs/cu ft

Water Source	Elapsed Time		Observation Time (Minutes)	Number of Observa- tions	Permeability in Ft/Yr	
	Days	Minutes			Range	Mean
Tap Water	0		118	3	76.7-85.5	79.9
Tap Water	2		45	9	54.4-89.4	70.0
Tap Water	5		25	5	62.2-77.8	68.4
Tap Water	6		49	11	58.3-68.0	62.3

Gypsum Slurry		15		1		58.3
"		53		1		55.2
"		70		1		52.6
"		82		1		43.7
"		113		1		33.8
"		125		1		43.7
"		235		1		28.1
"		315		1		19.7
"	1		538	12	4.6 -13.9	7.2
"	2		476	4	5.2 -11.7	6.6
"	3		1489	5	3.4 - 4.2	4.0
"	4		349	3	0.49- 3.1	1.7
"	7		541	3	0.07- 0.27	0.13
"	8		1431	3	1.1 - 1.3	1.3
"	9		1241	2	1.2 - 1.3	1.2
"	10		1626	2	0.89- 0.95	0.93
"	11		1265	2	0.55- 0.97	0.86
"	14		4235	2	0.82- 0.85	0.85

TABLE 3

PERMEABILITY RATES - SOIL SAMPLE "B"

Wet Density

Before Test 98.1 lbs/cu ft
After Test 114.1 lbs/cu ft

Moisture Content

Before Test 11.6%
After Test 28.7%

Dry Density

After Test 88.6 lbs/cu ft

Water Source	Elapsed Time		Observation Time (Minutes)	Number of Observa- tions	Permeability in Ft/Yr	
	Days	Minutes			Range	Mean
Tap Water	0		81	3	289.7-408.7	352.5
Tap Water	2		45	9	116.6-182.7	144.7
Tap Water	3		25	5	116.6-186.6	147.0
Tap Water	6		49	11	132.2-145.8	137.6

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Gypsum Slurry		15		1		114.0
"		53		1		115.1
"		90		1		33.6
"		102		1		50.2
"		133		1		29.4
"		145		1		22.7
"		250		1		10.0
"		333		1		9.1
"	1		477	12	1.2 -11.0	4.7
"	2		476	5	2.1 - 7.0	3.7
"	3		1489	5	1.9 - 2.6	2.5
"	4		1273	4	0.46- 2.1	2.0
"	7		4323	4	0.02- 1.3	1.4
"	8		1429	3	0.50- 1.2	1.1
"	9		1241	2	0.50- 1.0	0.63
"	10		1626	2	0.77- 0.87	0.80
"	11		1470	2	0.25- 1.0	0.75
"	14		4235	2	0.69- 0.95	0.84

TABLE 4

PERMEABILITY RATES - SOIL SAMPLE "C"

Wet Density

Before Test 97.6 lbs/cu ft
After Test 113.3 lbs/cu ft

Moisture Content

Before Test 11.3%
After Test 29.2%

Dry Density

After Test 87.7 lbs/cu ft

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability in Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	442	33	0-51.8	7.8
"	1	1675	5	1.3- 7.0	2.6
"	4	660	3	2.9- 5.2	3.4
"	5	1380	1	2.1	2.1
"	6	1455	2	1.3- 1.7	1.6
"	7	300	1	2.9	2.9
"	11	4843	4	1.2- 2.2	2.2
"	12	1410	3	1.2- 1.6	1.3
"	13	1073	1	1.3	1.3
"	15	3101	2	1.2- 2.4	1.3

TABLE 5

PERMEABILITY RATES - SOIL SAMPLE "D"

Wet Density

Before Test 98.5 lbs/cu ft
After Test 109.5 lbs/cu ft

Moisture Content

Before Test 13.2%
After Test 25.4%

Dry Density

After Test 87.0 lbs/cu ft

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability in Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	189	34	38.9-103.7	63.2
"	1	1470	4	5.1- 10.1	8.6
"	4	660	3	4.5- 6.3	5.2
"	5	1380	1	2.7	2.7
"	6	887	1	1.8	1.8
"	7	1430	2	2.2- 3.1	2.9
"	8	919	1	1.9	1.9
"	11	460	3	2.8- 3.3	3.0
"	12	1410	3	1.3- 2.2	2.0
"	13	1073	1	1.4	1.4
"	15	3101	2	0.97- 3.8	1.2

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TABLE 6

PERMEABILITY RATES - SOIL SAMPLE "E"

Wet Density

Before Test 89.7 lbs/cu ft
After Test 105.6 lbs/cu ft

Moisture Content

Before Test 12.2%
After Test 32.1%

Dry Density

After Test 80.0 lbs/cu ft

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability in Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	171	31	71.3 -259.2	122.0
"	1	755	3	4.0 - 7.6	4.9
"	4	660	3	1.5 - 2.7	2.4
"	5	1380	1	2.2	2.2
"	6	1425	2	2.2 - 2.4	2.3
"	7	300	1	1.2	1.2
"	8	919	1	2.2	2.2
"	11	460	3	0.86- 1.7	1.2
"	12	1410	3	1.6 - 1.9	1.8
"	13	1073	1	1.7	1.7
"	15	3101	2	0.50- 1.6	1.5

TABLE 7

PERMEABILITY RATES - SOIL SAMPLE "F"

<u>Water Source</u>	<u>Elapsed Time (Days)</u>	<u>Observation Time (Minutes)</u>	<u>Number of Observations</u>	<u>Permeability in Ft/Yr</u>	
				<u>Range</u>	<u>Mean</u>
Gypsum Slurry	0	36	3	168.5 -231.2	215.4
"	1	500	2	8.7 - 37.3	10.8
"	4	4045	2	0.51- 0.07	0.10
"	5	1660	4	0.14- 2.8	2.0
"	6	927	2	0.00- 0.13	0.06
"	7	1502	2	0.00	0.00
"	8	930	1	0.44	0.44
"	11	4875	1	0.46	0.46
"	12	1120	2	0.07- 0.23	0.10
"	13	1100	1	0.42	0.42

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DEFINITIONS

1. Anisotropic Minerals. The minerals which do not crystallize in an isometric system such as diamond, garnet, fluorite, etc., but contain a definite crystalline system of internal structure.
2. Anisotropic Permeability. The permeability varies with direction; i.e., horizontal versus vertical.
3. Bi-refringence. Light passing through a transparent mineral creates a double refraction and creates double images.
4. Parallel extinction. The wave motion of light has been limited to a single plane of vibration by absorption by certain crystals. When vibration is thus restricted, light is said to be polarized. Light transmitted through two plates of the material is eliminated where the plates overlap when the planes of vibration are 90° apart.

THE UNIVERSITY OF UTAH
COLLEGE OF MINES AND MINERAL INDUSTRIES
SALT LAKE CITY 84112

DEPARTMENT OF GEOLOGY
AND GEOPHYSICS

717 MINERAL SCIENCE BUILDING

August 15, 1975

Mr. Dennis J. Paulsen
Dames and Moore, Eng.
250 East Broadway
Salt Lake City, Utah

Dear Mr. Paulsen:

Two samples, designated Sample 1, silt loess-calcareous and Sample 2, indurated silt loess-noncalcareous, submitted to me on August 11, 1975 were subjected to x-ray analysis with the following results:

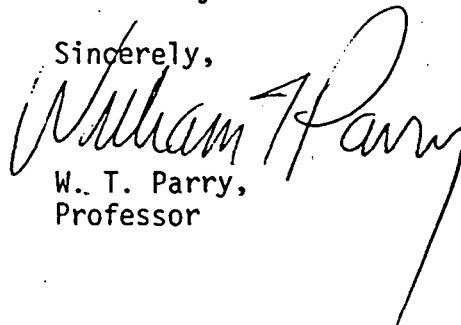
1. X-ray diffraction. A powder-pack mount of each sample was analyzed using Copper K-alpha radiation to determine differences between samples 1 and 2. Components identified in sample 1 are quartz, calcite, and dolomite. Quartz was identified in sample 2. Calcite and dolomite are missing from sample 2. An additional component or components is present in sample 2 with x-ray diffraction d-spacings of 9.61, 5.91, 5.07, 4.19, 3.23, 2.83, 2.72, 2.56, 2.34, and 2.18 angstrom units. A thorough and careful search of our powder diffraction file has failed to produce a firm identification of this material.

2. X-ray emission. Phosphorous, sulfur, calcium, and aluminum contents of samples 1 and 2 were compared using 1-1/4 inch diameter pellets of the samples and a chromium target x-ray tube. Sample 2 contains more S, P, Ca and less Al than sample 1.

The unidentified substance in sample 2 is probably a compound or compounds of calcium, phosphite and/or sulfate possibly containing iron and magnesium. Definite identification will require tedious and time consuming procedures such as heavy liquid separation and purification of the unknown, petrographic analysis of thin sections, or electron microprobe analysis. As a first step complete chemical analysis of samples 1 and 2 for SO_4 , PO_4 , Na, Mg, Al, Si, P, K, Ca, Mn, Fe, V, etc., is suggested.

The x-ray diffraction and emission analysis charts are enclosed.

Sincerely,


W. T. Parry,
Professor

WTP/dl

Enclosures

REPORT OF SOIL STUDIES

GYPSUM TAILINGS POND

POCATELLO, IDAHO

FOR THE J. R. SIMPLOT COMPANY

DAMES & MOORE

EARTH SCIENCES

REPORT OF SOIL STUDIES

GYPSUM TAILINGS POND

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DAMES & MOORE

CONSULTANTS IN APPLIED EARTH SCIENCES
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SAN FRANCISCO
SEATTLE

415 SOUTH SECOND EAST STREET · SALT LAKE CITY 11, UTAH · ELGIN 9-8764

PARTNER: WARREN D. CURTIS

July 10, 1962

J. R. Simplot Company
P. O. Box 912
Pocatello, Idaho

Attention: Mr. Keith A. Bithell

Gentlemen:

Ten copies of our "Report of Soil Studies, Gypsum Tailings Pond, Pocatello, Idaho, For the J. R. Simplot Company", are herewith submitted.

The scope of these studies was planned in consultation with Mr. Keith A. Bithell of the J. R. Simplot Company. Historical data of the existing tailings embankment and other information pertinent to our studies were provided to us by Mr. Bithell.

The existing dike has a computed safety factor of one. It is therefore concluded that additional construction on top of the existing dike may precipitate a general slide failure. Recommendations for stabilizing the existing dike and construction of additional embankment height are included herewith.

Preliminary recommendations were presented verbally in a conference held with personnel from the J. R. Simplot Company on June 11, 1962. Recommendations for the existing embankment correction were presented in our preliminary letter dated June 13, 1962.

Yours very truly,

DAMES & MOORE


Warren D. Curtis

WDC/KS:ml

REPORT OF SOIL STUDIES

GYPSUM TAILINGS POND

POCATELLO, IDAHO

FOR THE J. R. SIMPLOT COMPANY

SCOPE

Presented in this report are our recommendations, with substantiating data, resulting from our soil studies at the site of the Proposed Gypsum Tailings Pond that is being developed near Pocatello, Idaho, for the J. R. Simplot Company.

The plant site of the Simplot Company is located approximately one mile northwest of the City of Pocatello, Idaho, on U. S. Highway 30 North. The existing tailings pond is bounded on the north by the mainline tracks of the Union Pacific Railroad, and on the west by the Simplot plant. The location of the site with respect to surrounding topographic features is presented on Plate 1, Map of Area. The location and topographic terrain of the existing tailings pond and dike are shown on Plate 2, Plot Plan.

Our studies were undertaken for the following purposes:

1. To determine the subsurface soil and ground water conditions of the existing tailings pond dike and discharged tailings materials.
2. To analyze the level of safety from a stability standpoint of the existing tailings pond dike.
3. To recommend construction methods that can be employed in increasing the present embankment height.
4. To recommend materials which may be utilized in future embankment construction.
5. To recommend criteria for the placement of embankment materials.

6. To recommend safe slopes and maximum height for a continued increase in embankment height.

The results of our field explorations and laboratory tests, which provide the basis for our recommendations, are presented in Appendix A, Field Explorations and Laboratory Tests. The dike history is set forth in Appendix B, Historical Sketch of Gypsum Storage Pond.

SITE CONDITIONS

The tailings pond at present occupies a plan area of approximately 700 by 1200 feet. The site lies on the south edge of the river flood plane formed by the Portneuf River. To the south of the site, the terrain rises to form the foothills of the mountain range. The existing pond is bounded on the north by the mainline tracks of the Union Pacific Railroad and on the west by the Simplot plant. The foothills form the southern limits of the pond, and the terrain is slightly rolling to the east of the pond.

The natural riverbed deposits consist predominantly of sand and gravel with a small fraction of silt-sized particles. The natural deposit of the foothills consist predominantly of silts with scattered gravels and boulders.

We understand that a commercial gravel pit at one time occupied the site of the existing tailings pond. In the development of the pond, gypsum tailings were deposited by hydraulic methods into the pit. As the height of the pond was increased, natural soils were imported from the foothills to the south to form the perimeter embankments on the north, west and east sides of the pond. At the present time, the embankment is approximately 50 feet in height adjacent to the railroad right of way.

The subsurface soil conditions at the site were explored by drilling seven exploration borings with truck-mounted rotary wash-boring equipment. These borings ranged in depths from 20 to 57 feet below the ground surface. Borings 1, 2, 6 and 7 were drilled through the existing embankment. Borings 3 and 4 were drilled through the gypsum tailings within the embankment and Boring 5 was drilled in the natural soil deposits of the adjoining foothills to the south. In addition to these borings, 11 hand auger borings were drilled to obtain bulk samples of the natural soils and gypsum deposits at various locations. The locations of all of the borings are shown on Plate 2. Detailed descriptions of the soils encountered in the borings are presented in Appendix A of this report.

In general, as revealed by our borings, the natural soils of the adjoining foothills, which were utilized in the perimeter embankments, consist predominantly of silts interspersed with gravel. The gypsum deposits within the embankment also consisted predominantly of silt-sized particles. Due to this similarity in materials, it was extremely difficult to delineate between the natural soils and the gypsum tailings in the borings drilled through the embankment. However, from the results of moisture and density determinations, it is believed that the natural soils may extend as deeply as 30 feet below the top of the embankment at the locations of Borings 1 and 2. At the locations of Borings 6 and 7, the gypsum was encountered at a depth of approximately 12 feet. It is believed that the construction procedure in the past may have resulted in a partial mixing of the two types of materials. All of the borings except Boring 5 were terminated in the natural sand-and-gravel deposit.

At the time of our explorations, standing water was encountered at various depths below the ground surface. The depth at which ground water

was encountered is presented on the detailed logs presented in Appendix A.

DEVELOPMENT OF POND

We have been provided with a brief historical sketch of the procedures employed in the construction of the present embankment. This history is presented in Appendix B of this report.

It is desirous from a Simplot operational standpoint to heighten the present embankment. It is understood that with the present rate of discharge and present area available for storage, the pond will fill at a rate of approximately 10 feet per year. At the time of our exploration, the level of the pond was approximately 10 feet below the existing embankment. Additional embankment height is needed for future plant operations.

Present methods of tailing placement consist of a perimeter discharge along the outer limits of the pond. Free water from the hydraulic discharge system drains to lower ground adjacent to the hillside to the south of the pond. Free water is thereafter removed through a decanting system and is returned to the plant. We understand that this system will be maintained as the pond increases in height.

DISCUSSION AND RECOMMENDATIONS

PRESENT EMBANKMENT:

We have analyzed the level of safety from a stability standpoint of the present tailings pond embankment. Our analyses has been based on a sliding circular type of failure. A failure of this type would result if the actuating forces would exceed the resisting forces of the soil mass. Based on the results of our laboratory test data and engineering analyses, it is concluded that the existing embankment has a factor of safety of one.. Such a factor is considered precipitous in normal embankment design. It is thus recommended that no additional construction be undertaken to heighten

the existing embankment without first undertaking corrective measures. Stability of the embankment also requires that the surface of ponded water be maintained away from the perimeter of the embankment. A minimum distance of 150 feet is recommended. The discussion that follows on corrective measures is based on the assumption that this minimum distance will be maintained in plant operations. Minimum distances are shown on Plates 3-A and 3-B.

RECOMMENDED CORRECTIVE MEASURES FOR PRESENT EMBANKMENT:

It is considered a likely possibility that additional construction on top of the present embankment may precipitate a general slide-type failure. There are numerous methods for correcting a potentially unstable embankment condition. The most feasible in most cases is to flatten the existing slope, thereby reducing the driving forces which tend to cause motion. It is realized that change in the geometric shape of the embankment will present difficult construction problems. However, it is recommended that such a change be made to permit stability in the future embankment.

In our studies, we have analyzed two different methods of slope correction. In our initial plan, it is recommended that the top 17 feet of the outside slope of the present embankment be flattened to a slope of approximately two and one-half horizontal to one vertical. From the data presently available, it is anticipated that such a cut will not penetrate into the underlying gypsum materials. The material taken from the cut may be utilized in building on top or to the inside face of the present embankment. A typical cross section showing the existing embankment and the proposed new configuration is presented on Plate 3-A, Typical Cross Section - Plan A. The embankment, if corrected in accordance with these recommendations, will possess a factor of safety on the order of 1.2 against a sliding-type failure.

An alternate method of correction is presented on Plate 3-B, Typical Cross Section - Plan B. In this plan, it is recommended that the top 10 feet of the outside slope of the present embankment be flattened to a slope approaching three horizontal to one vertical. The embankment materials resulting from such a cut can be pushed down to the toe of the embankment. The additional weight at the toe will aid materially in the stability of the embankment. However, such a plan will be dependent on the lateral dimension of the property which is available to the J. R. Simplot Company. It is anticipated that a minimum lateral distance of 10 feet from the toe of the present embankment will be required for this plan. It has been computed that this plan will provide for a factor of safety on the order of 1.2 against a sliding-type failure.

Ease of construction will probably necessitate the plan which will be utilized to correct the existing embankment. Either plan recommended will be satisfactory from a stability standpoint.

FUTURE EMBANKMENT DESIGN:

After correction of the present embankment slope is accomplished, it is recommended that a slope of three horizontal to one vertical be utilized for the outside slope of the future embankment. Our studies were directed toward the utilization of either natural soils from the adjacent foothills or gypsum from the existing pond for this construction. However, based on the results of our laboratory tests and engineering analyses, it is concluded that the natural soils exhibit more predictable strength, consolidation, and permeability characteristics, and can be placed more readily than the gypsum. Thus, in our discussions with engineers from the J. R. Simplot Company, it was recommended that the natural soils be utilized for the future perimeter embankment. Our analyses has been directed toward the utilization of the natural soils.

It is recommended that the future embankment be mechanically placed and compacted in layers. The function of compaction is primarily that of making the cover material more stable against wind and rain water erosion than would otherwise develop from loose dumping. With the use of a three-to-one slope, compaction control is not critical to stability. Recommended specifications for the placement of the future embankment materials are outlined in Appendix C of this report. These compaction requirements are not severe and can be readily obtained by reasonable care on the part of the contractor.

We have analyzed the level of safety from the standpoint of a sliding-type failure for an additional 100-foot-high embankment. A computed factor of safety on the order of 1.2 is attainable with a slope of three to one. This factor of safety is dependent upon maintaining the surface of the ponded water at a minimum distance of 150 feet from the edge of the slope. If this distance is maintained, it is anticipated that leakage through the embankment will be inconsequential in amount.

From our discussions, it is understood that the embankment will be constructed in annual stages of approximately 10 feet in height. The gypsum tailings will be discharged until the pond is essentially filled and another embankment stage will be constructed. The possibility of slides into the tailings pond during the construction stage when equipment is operating on the inside edge of the embankment has been investigated. A factor of safety against sliding of 1.5 is maintained if slopes are not steeper than one and one-half horizontal to one vertical for the 10-foot height. It is considered that this slope is the angle of repose of the natural soils. These findings are based on average conditions for gypsum that has been drained. Operators of equipment should be alert for minor pockets of

soft material which can be resolved by use of flatter slopes over soft sections.


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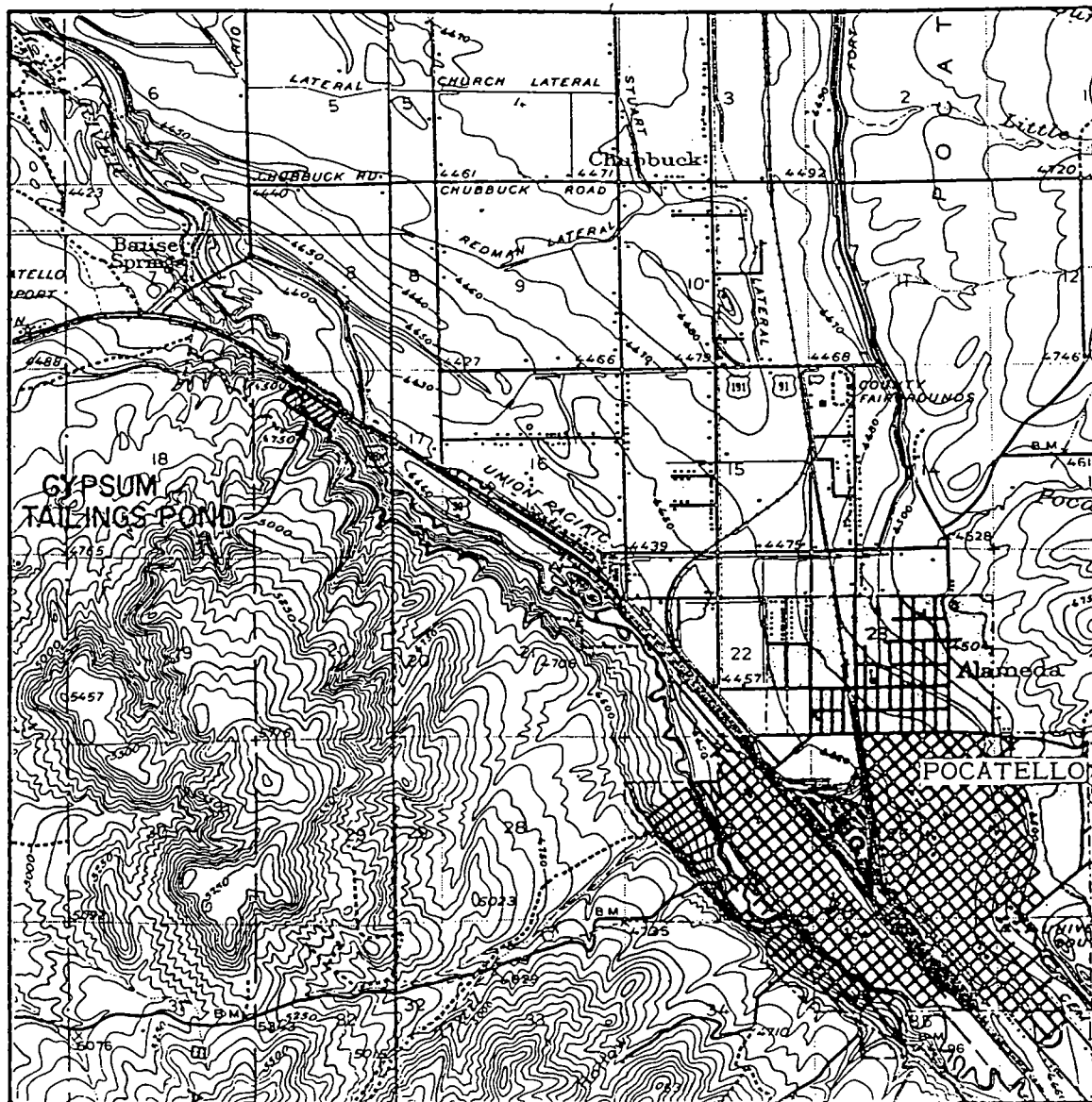
The following Plates and Appendices are attached and complete this report:

- Plate 1 - Map of Area
- Plate 2 - Plot Plan
- Plate 3-A - Typical Cross Section - Plan A
- Plate 3-B - Typical Cross Section - Plan B
- Appendix A - Field Explorations and Laboratory Tests
- Appendix B - Historical Sketch of Gypsum Storage Pond
- Appendix C - Suggested Specifications for Placing Embankment Fills

Respectfully submitted,

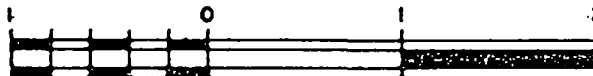
DAMES & MOORE


Warren D. Curtis

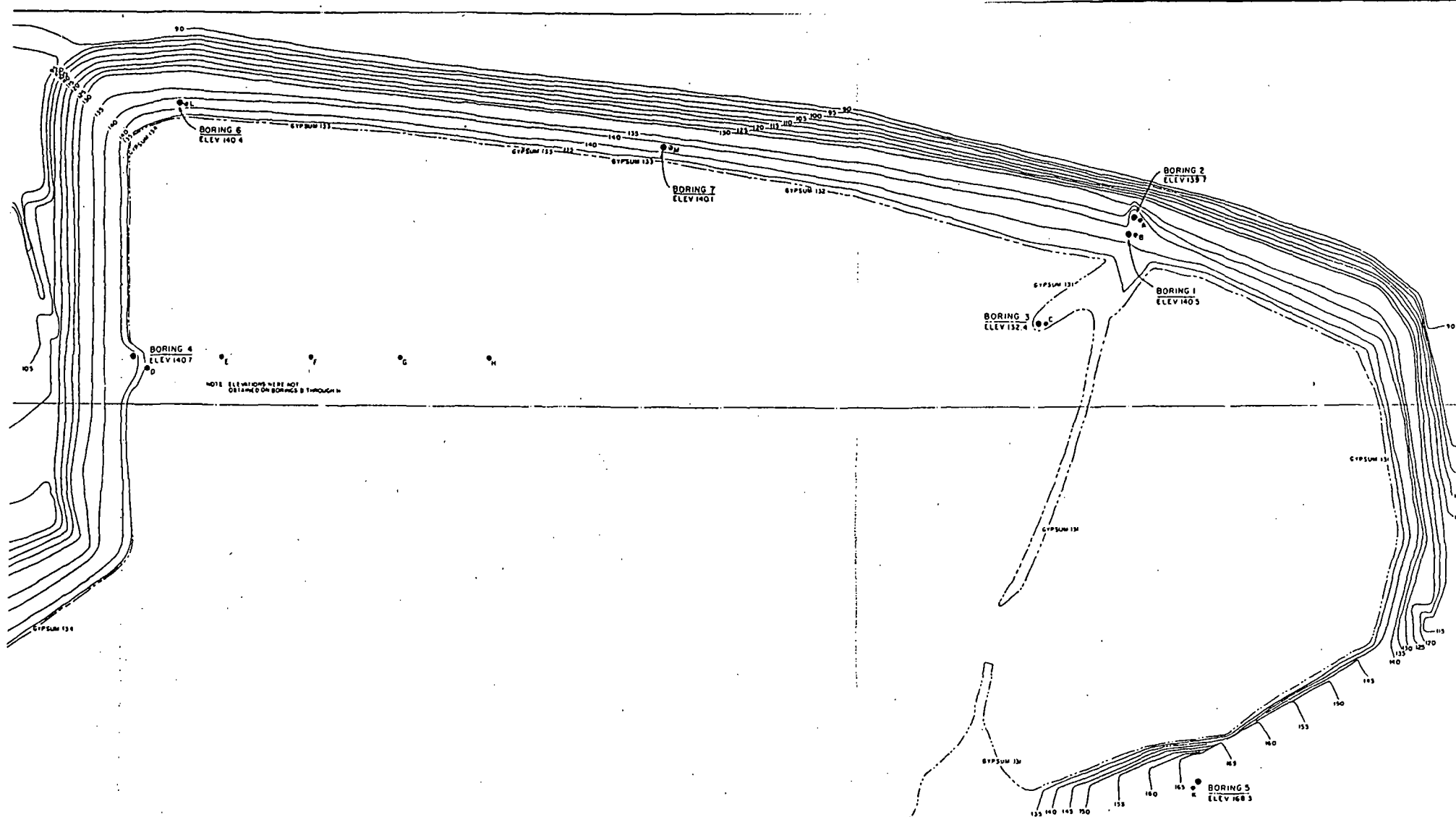


• U.S.G.S. MAPS OF MICHAUD, IDAHO QUADRANGLE
AND POCA TELLO, IDAHO QUADRANGLE.

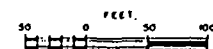
SCALE IN MILES

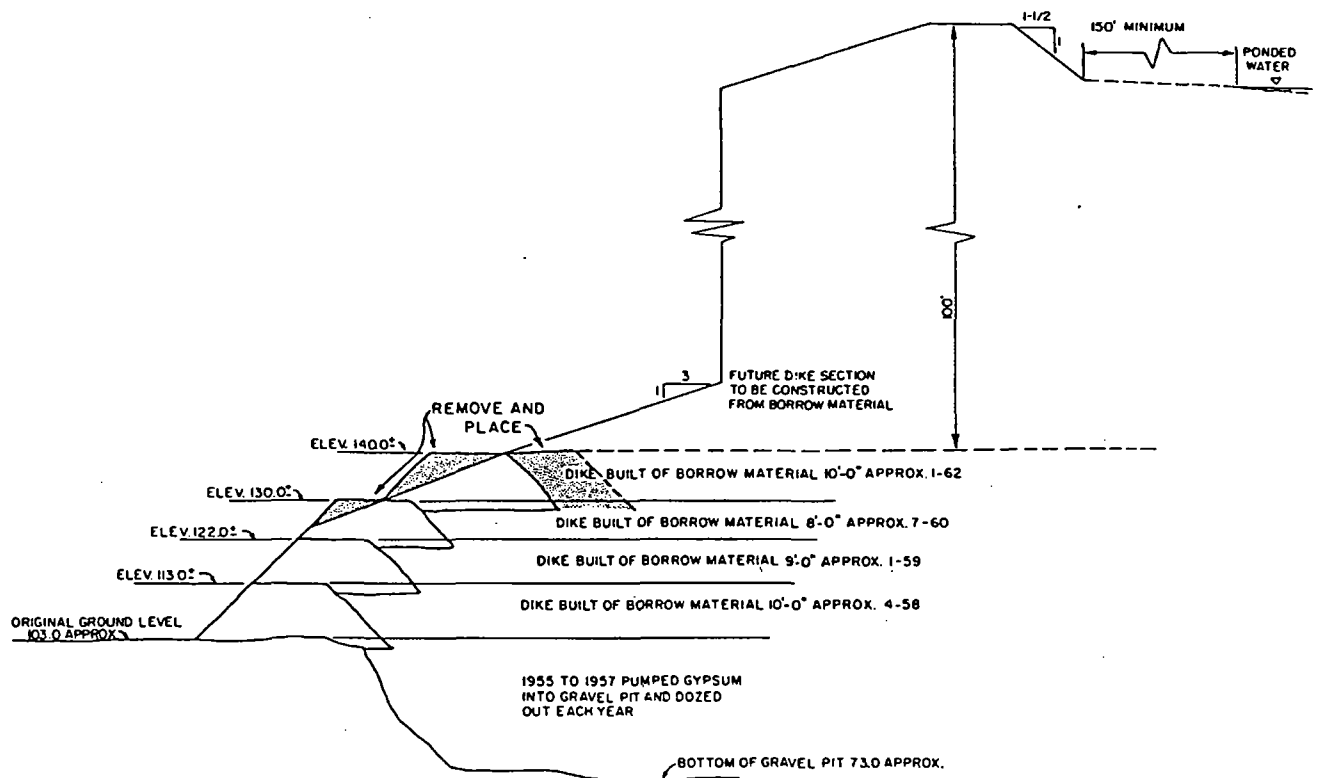


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PLOT PLAN

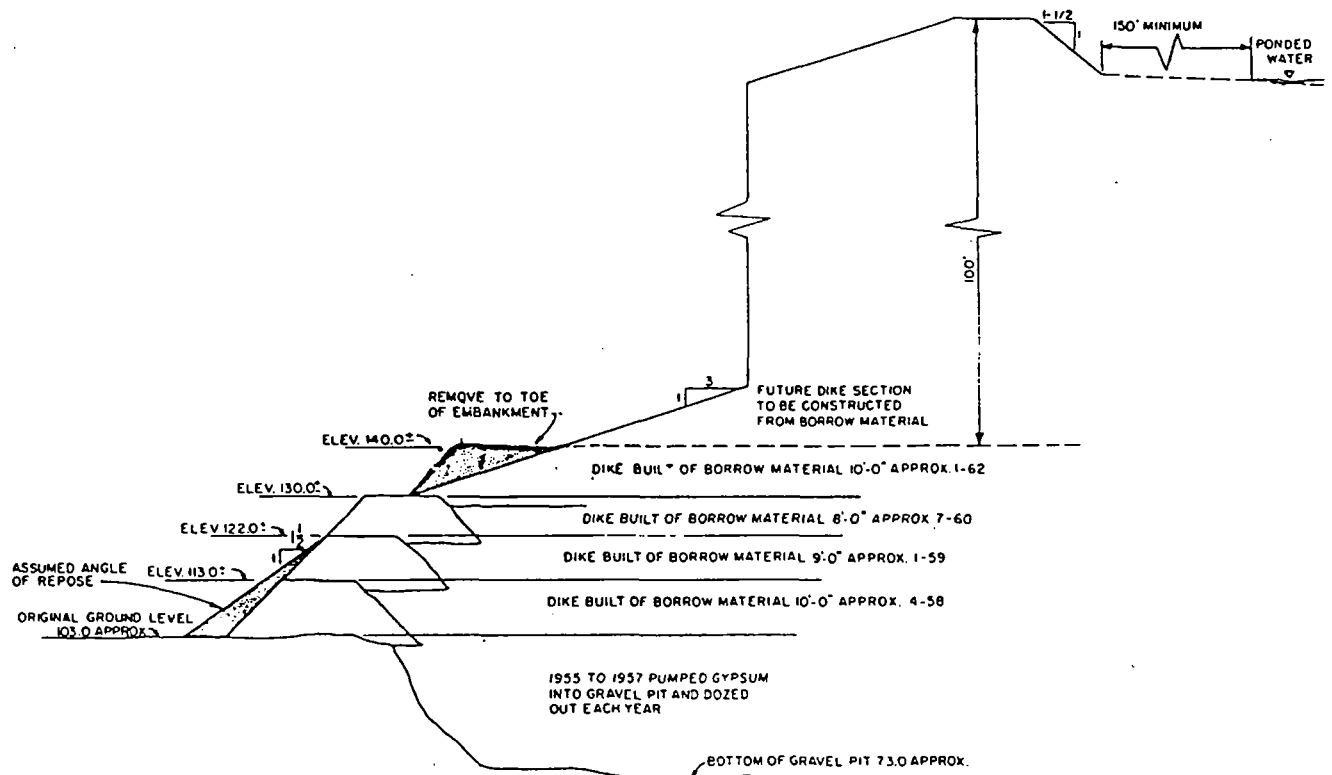




REFERENCE:
SECTION TITLED, "HISTORICAL CROSS SECTION WEST AND NORTH
WALLS GYPSUM POND DIKE 1955 TO 1962", TAKEN FROM PRINT NO. K-101,
BY THE J.R. SIMPLOT CO., DATED 4-29-62, AND TITLED, "CONVEYING
AND STORAGE DIVISION SECTIONS GYPSUM STORAGE POND DIKE 1962".

TYPICAL CROSS SECTION PLAN A





REFERENCE:
SECTION TITLED, "HISTORICAL CROSS SECTION WEST AND NORTH WALLS GYPSUM POND DIKE 1955 TO 1962", TAKEN FROM PRINT NO. K-101, BY THE J.R. SIMPLOT CO. DATED 4-29-62, AND TITLED, "CONVEYING AND STORAGE DIVISION SECTIONS GYPSUM STORAGE POND DIKE 1962".

TYPICAL CROSS SECTION PLAN B



APPENDIX A

FIELD EXPLORATIONS AND LABORATORY TESTS

FIELD EXPLORATIONS

The subsurface soil conditions at the site were explored by drilling seven test borings to depths ranging from 20 to 57 feet below the ground surface. Six of these borings in the embankment and tailings pond area penetrated into the underlying sand, gravel and boulder formation. In addition, 11 hand auger borings were also drilled.

Undisturbed samples of the various soils penetrated were obtained utilizing the Dames & Moore Soil Sampler illustrated on Page A-I. In addition, loose bulk samples of the various soils were obtained from the hand auger borings. The soils encountered in the borings were classified in the field by visual and textural examination and the classifications were verified by further inspection and testing of the samples in the laboratory. Graphical representations of the soils encountered in the borings are shown on Plates A-1A through A-1G, Log of Borings. The nomenclature utilized to classify the soil types is described on Plate A-2, Soil Classification Chart and Key to Test Data.

Ground surface elevations are presented above the log of each test boring. These elevations were provided to us by the engineering staff of the J. R. Simplot Company.

LABORATORY TESTS

GENERAL:

The physical characteristics of the soils encountered at the site were determined in a series of laboratory tests on samples obtained during our field explorations. These tests include triaxial compression tests, direct shear tests, consolidation tests, compaction tests, percolation tests,

particle-size determinations, and moisture and density determinations. The test results are presented in the appropriate sections of this Appendix. This Appendix contains information on the methods utilized in performing the various tests.

STRENGTH TESTS:

Triaxial compression tests and direct shear tests were performed on selected soil samples to determine the strength characteristics of the various soil strata encountered in the borings. The results of the strength tests, and the associated moisture and density determinations, are presented to the left of the Log of Borings in the manner described by the Key to Test Data shown on Plate A-2. The tests were performed as follows:

Triaxial Compression Tests: Prior to testing, the samples to be tested were saturated and consolidated at the designated confining pressure. The samples, approximately two and one-half inches in diameter and five to six inches in length, were extruded from the sampling rings and the ends fitted with porous stones. Constant lateral air pressure, known as confining pressure, was maintained around a thin rubber membrane in which the sample was encased. The drainage lines connected to the cap and base were sealed to prevent escape of water during the test. The samples were then subjected to axial deflection at a constant rate, and the resistances to compression in the soil were measured. Stress-strain curves for each test were drawn from which the yield point resistances to compression were obtained. For each type of soil tested, a series of Mohr's Circles, one for each test, were plotted on common axes. The relationship of shear strength to normal pressure was then obtained from the strength envelope of the appropriate Mohr's Circles.

Direct Shear Tests: Direct shear tests were also performed on selected undisturbed soil samples to determine the strength characteristics of the various soil strata. The tests were performed in the manner described on Page A-II, Method of Performing Direct Shear and Friction Tests. The tests were performed at field moisture and at saturated moisture conditions to determine the effect of saturation upon the strength characteristics of the soils. Furthermore, the tests were performed at surcharges (pressure applied normal to the ends of the sample) corresponding to the approximate weight of the overburden pressures encountered in the field. A load-deflection curve was plotted for each test and the shearing strength was determined from this curve.

In addition to the direct shear tests performed on the undisturbed soil samples, tests were also performed on compacted core samples of the various materials. The core samples were compacted to 95 per cent of the maximum density attainable as determined by compaction tests. These tests were performed at optimum and saturated moisture conditions and under various surcharge pressures to determine the angle of internal friction of the soils. The results of the direct shear tests performed on the compacted core samples are presented on Plates A-3 and A-4, Compaction Studies.

CONSOLIDATION TESTS:

In order to provide data for the determination of settlement of the Proposed Embankment, consolidation tests were performed on representative undisturbed and compacted core samples. The core samples were compacted to 95 per cent of the maximum density attainable as determined by compaction tests. The tests were performed in accordance with the Method of Performing Consolidation Tests described on Page A-III of this Appendix. The samples were saturated prior to testing. The results of the consolidation tests

performed on compacted core samples are presented on Plates A-3 and A-4. The results of the tests performed on undisturbed soils are presented on Plate A-5, Consolidation Test Data.

COMPACTION TESTS:

In order to study the compaction characteristics of the on-site natural and gypsum soils, compaction tests (Modified A.A.S.H.O.* T 180-57 Method) were performed on selected bulk samples. The tests were performed in the manner described on Page A-IV, Method of Performing Compaction Tests. The results of the compaction tests are presented on Plates A-3 and A-4.

PERCOLATION TESTS:

In order to study the permeability characteristics of the on-site natural and gypsum soils, percolation tests were performed on representative undisturbed and compacted core samples. The core samples were compacted to 95 per cent of the maximum density attainable as determined by compaction tests. The tests were performed in accordance with the Method of Performing Percolation Tests described on Page A-V of this Appendix. The results of the percolation tests are as follows:

<u>Sample</u>	<u>In-Place Undisturbed or Compacted Core Sample</u>	<u>Soil Type</u>	<u>Percolation Rate (Expressed in Feet Per Year Under a Hydraulic Gradient of One)</u>
Boring 3 at 8'	In-Place	Lt. gray silt (gypsum)	675
Boring 7 at 4'	In-Place	Lt. brown silty loam	2
Boring D**	Compacted Core	Lt. gray silt (gypsum)	40
Boring D	Compacted Core	Lt. gray silt (gypsum)	50
Boring K	Compacted Core	Lt. brown silty loam	3

**This test was performed utilizing acid water obtained from the gypsum pond.

*American Association of State Highway Officials

PARTICLE-SIZE ANALYSES:

To determine particle-size gradation, sieve and hydrometer tests were performed on the various materials. The tests were performed in accordance with the standards defined by the A.S.T.M. under Designation D 422-54T. The results of the hydrometer tests are presented on Plates A-6A, A-6B, and A-6C, Particle-Size Distribution.

MOISTURE AND DENSITY DETERMINATIONS:

In addition to the moisture and density determinations which were performed in conjunction with the strength and consolidation tests, moisture and density determinations were also performed on additional selected samples. The tests were performed to provide data for correlation between soils at various depths and in different borings. The results of these tests are presented to the left of the Log of Borings.

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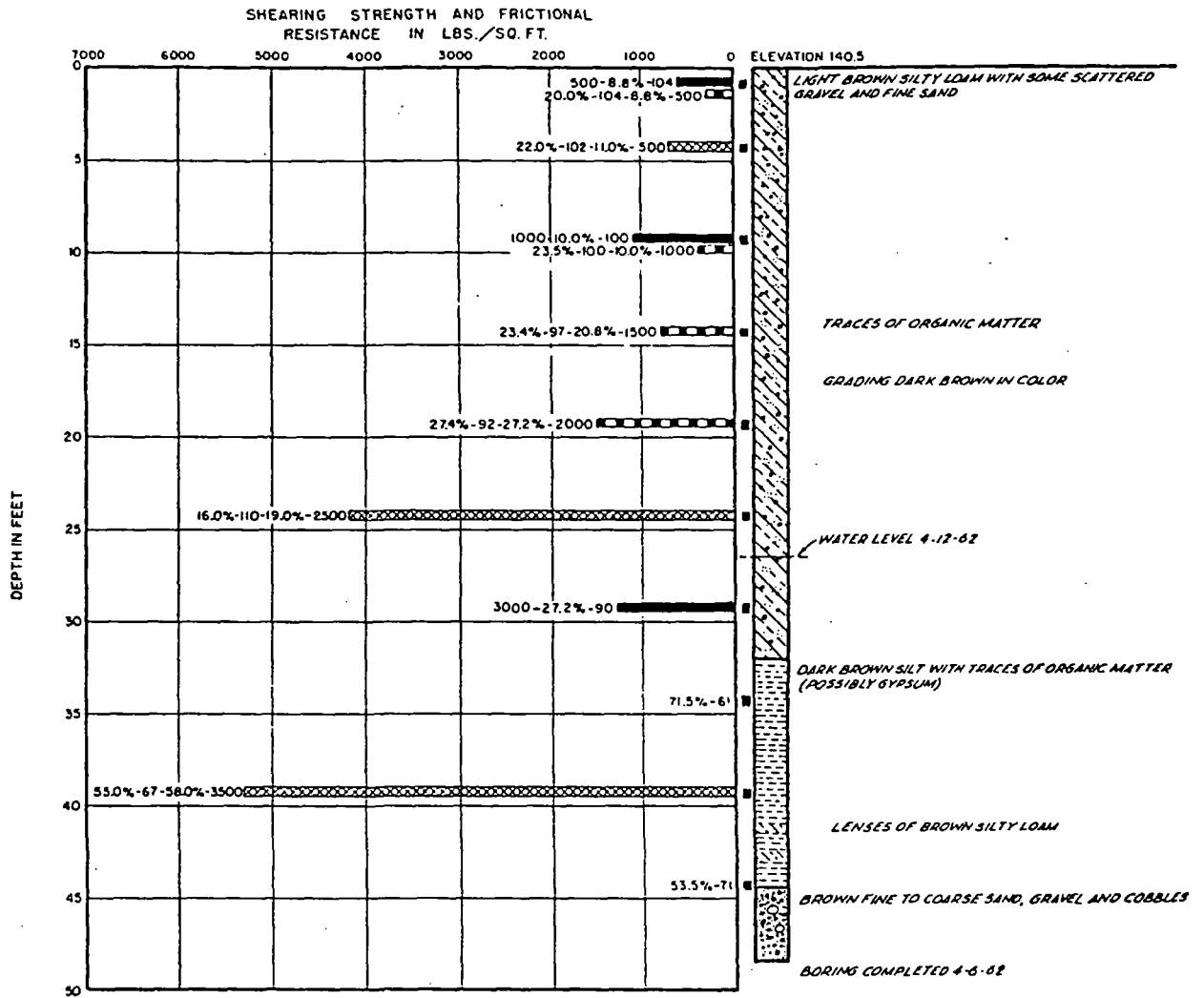
The following Plates are attached and complete this Appendix:

- Plate A-1A - Log of Borings (Boring 1)
- Plate A-1B - Log of Borings (Boring 2)
- Plate A-1C - Log of Borings (Boring 3)
- Plate A-1D - Log of Borings (Borings 4 and 5)
- Plate A-1E - Log of Borings (Boring 6)
- Plate A-1F - Log of Borings (Boring 7)
- Plate A-1G - Log of Borings (Borings A, B, C, D, E, F, G, H, K, L, and M)
- Plate A-2 - Soil Classification Chart and Key to Test Data
- Plate A-3 - Compaction Studies, Light Brown Silty Loam (Natural Soils)
- Plate A-4 - Compaction Studies, Light Gray Silt (Gypsum)

A-6

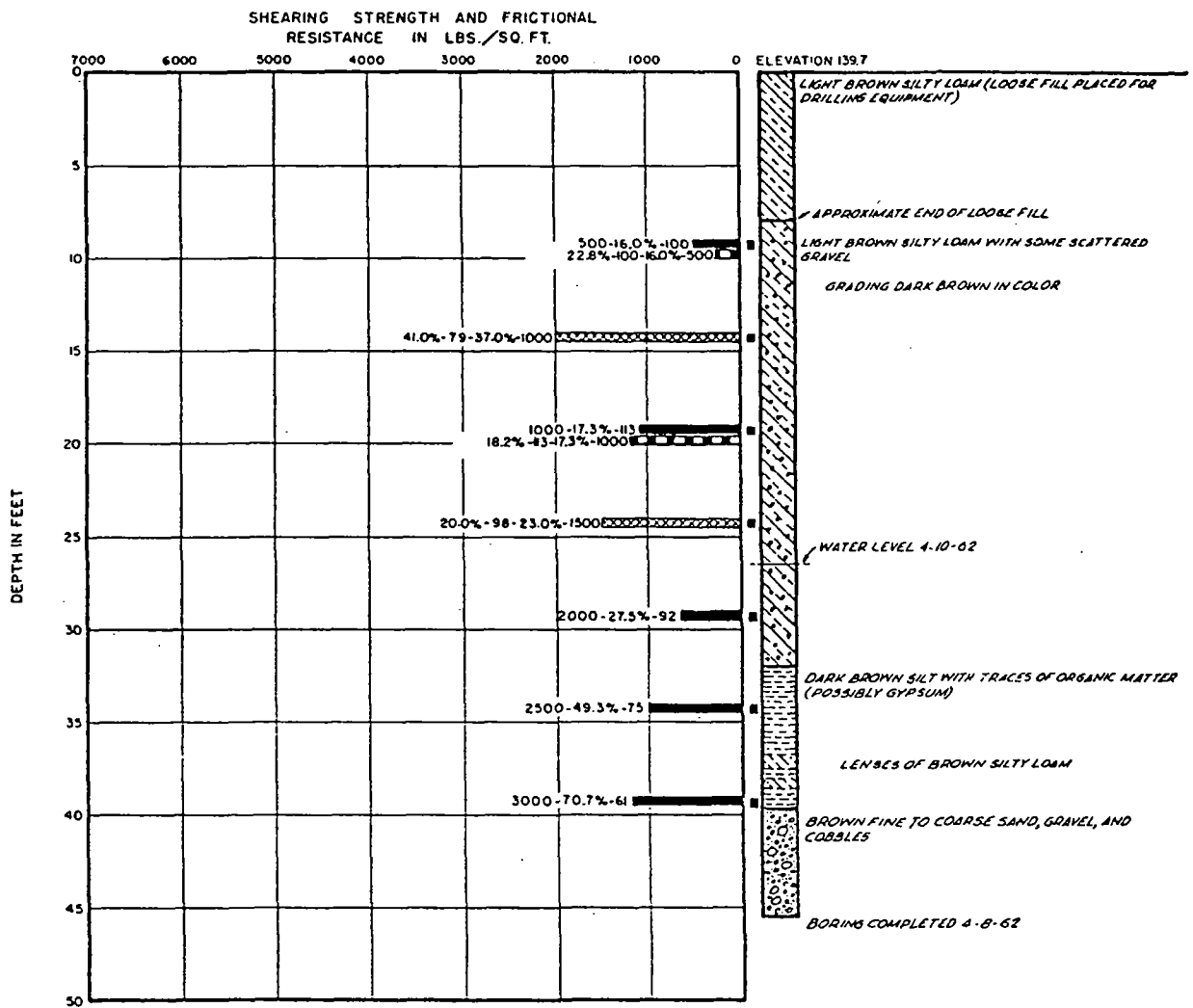
- Plate A-5 - Consolidation Test Data
- Plate A-6A - Particle-Size Distribution
- Plate A-6B - Particle-Size Distribution
- Plate A-6C - Particle-Size Distribution

BORING I



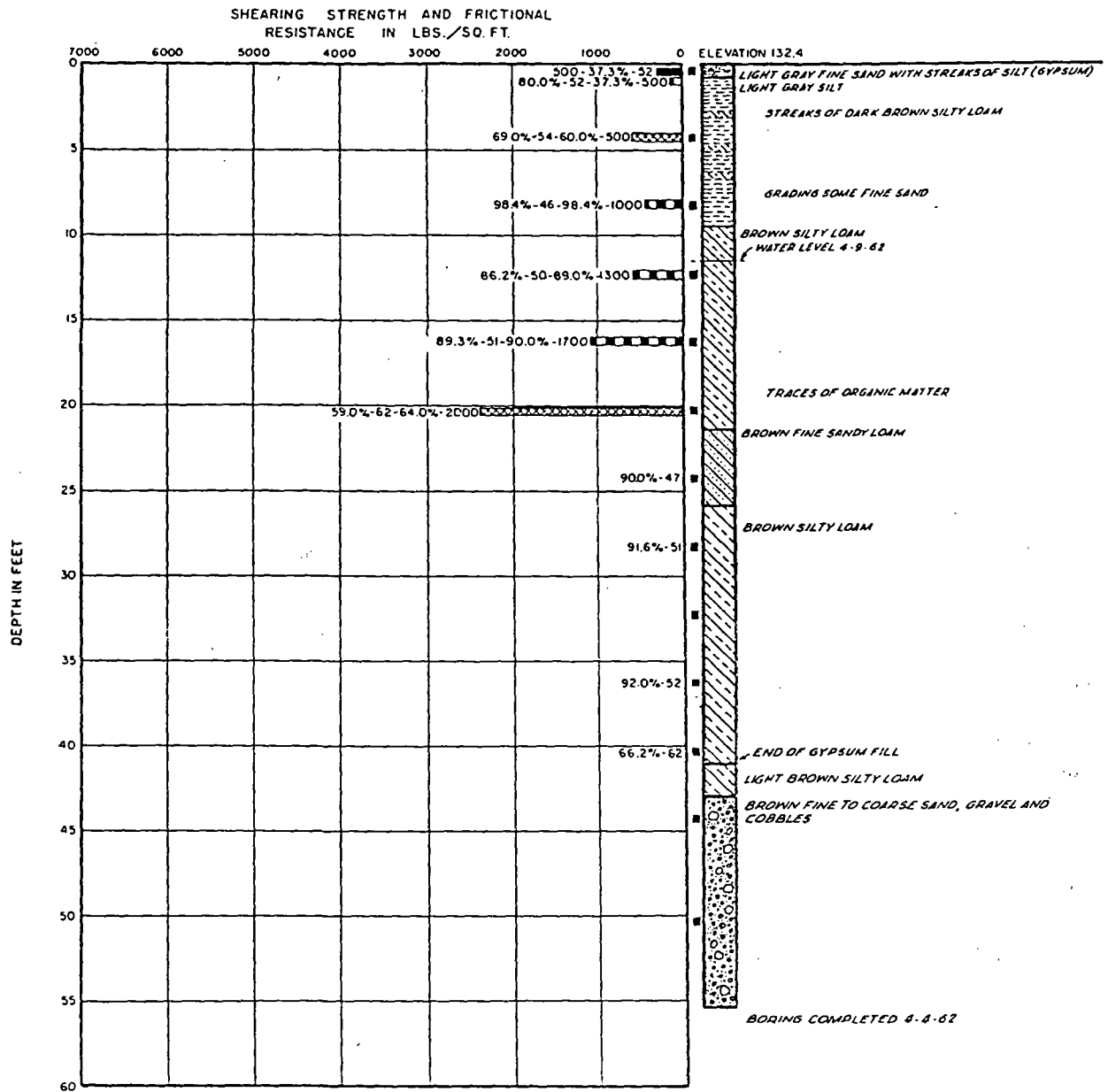
LOG OF BORINGS

BORING 2



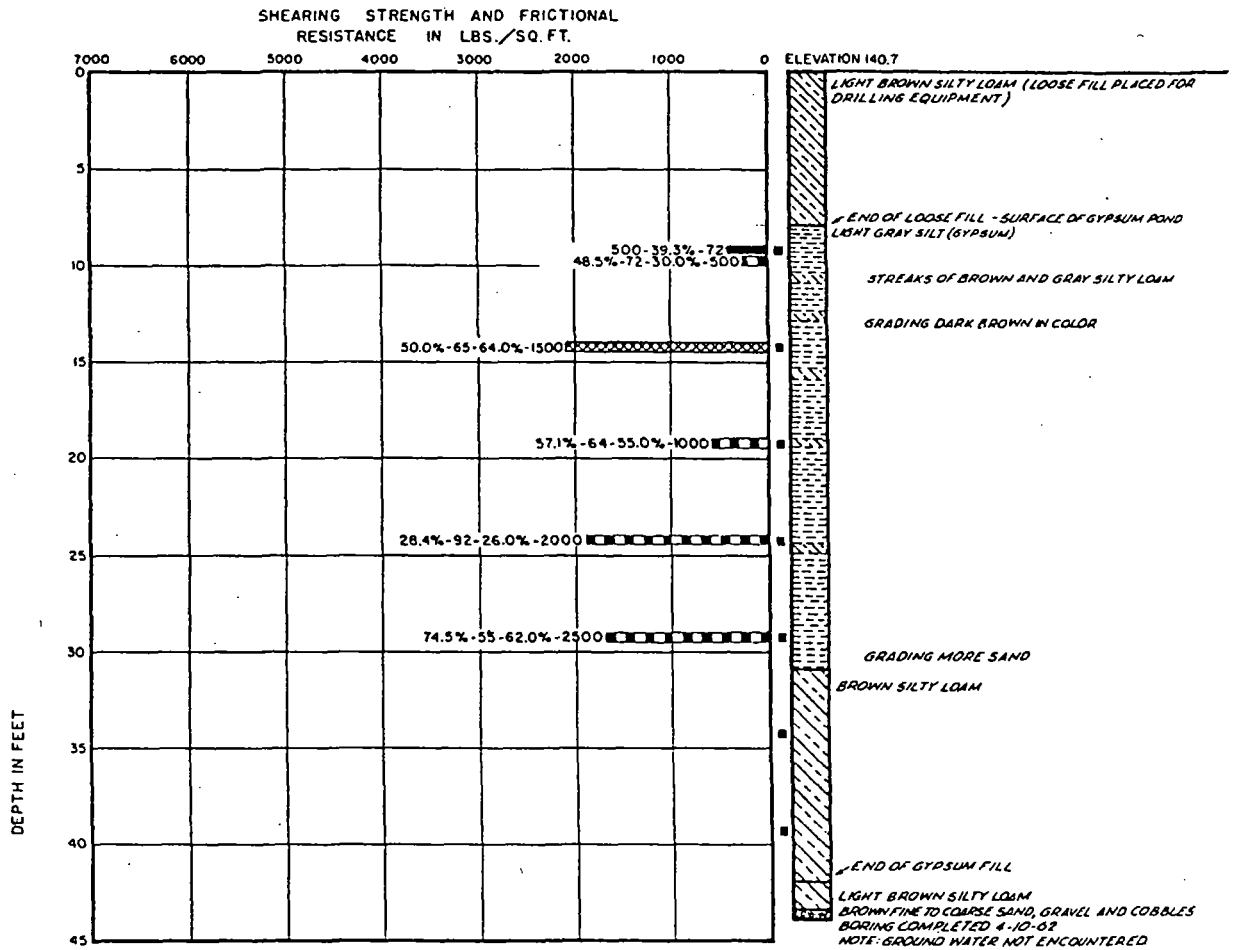
LOG OF BORINGS

BORING 3

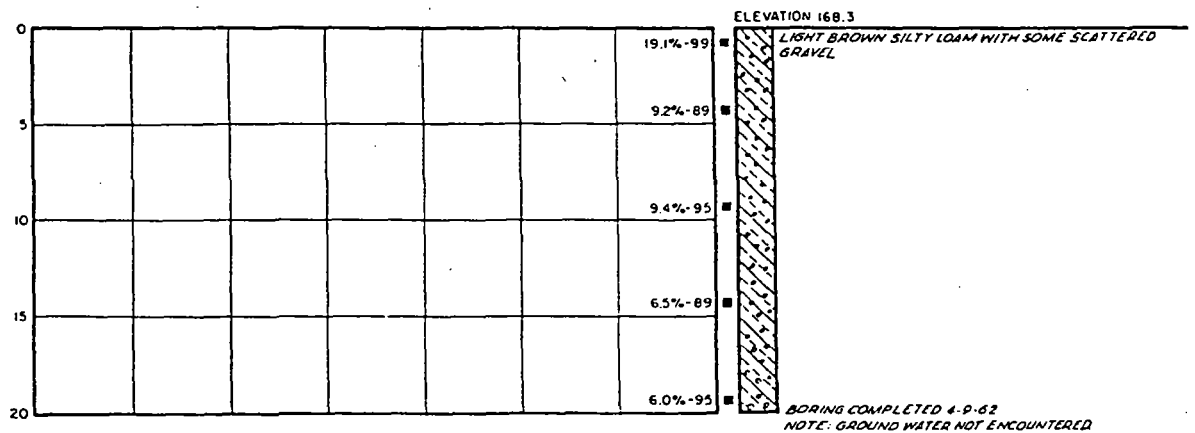


LOG OF BORINGS

BORING 4

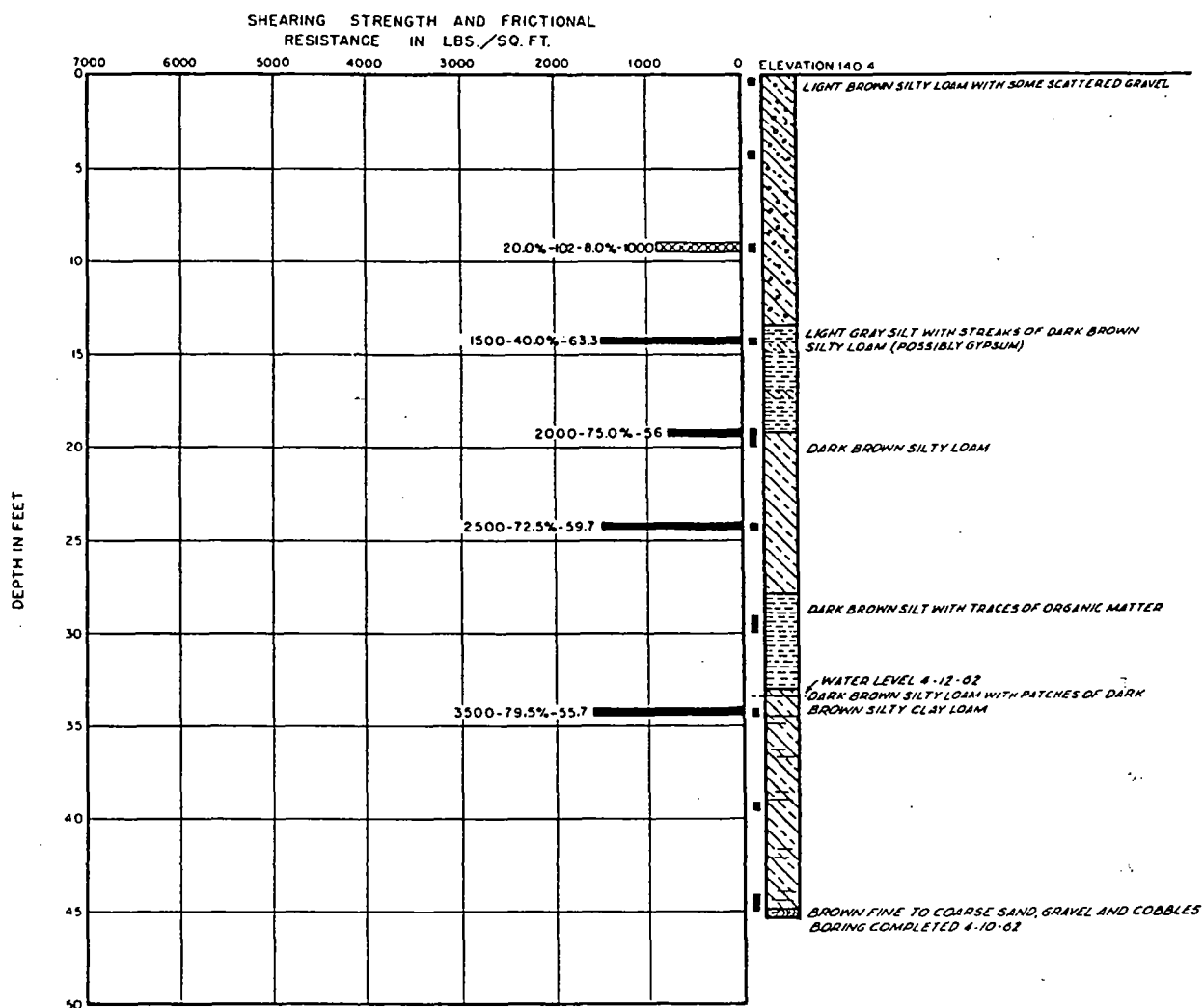


BORING 5



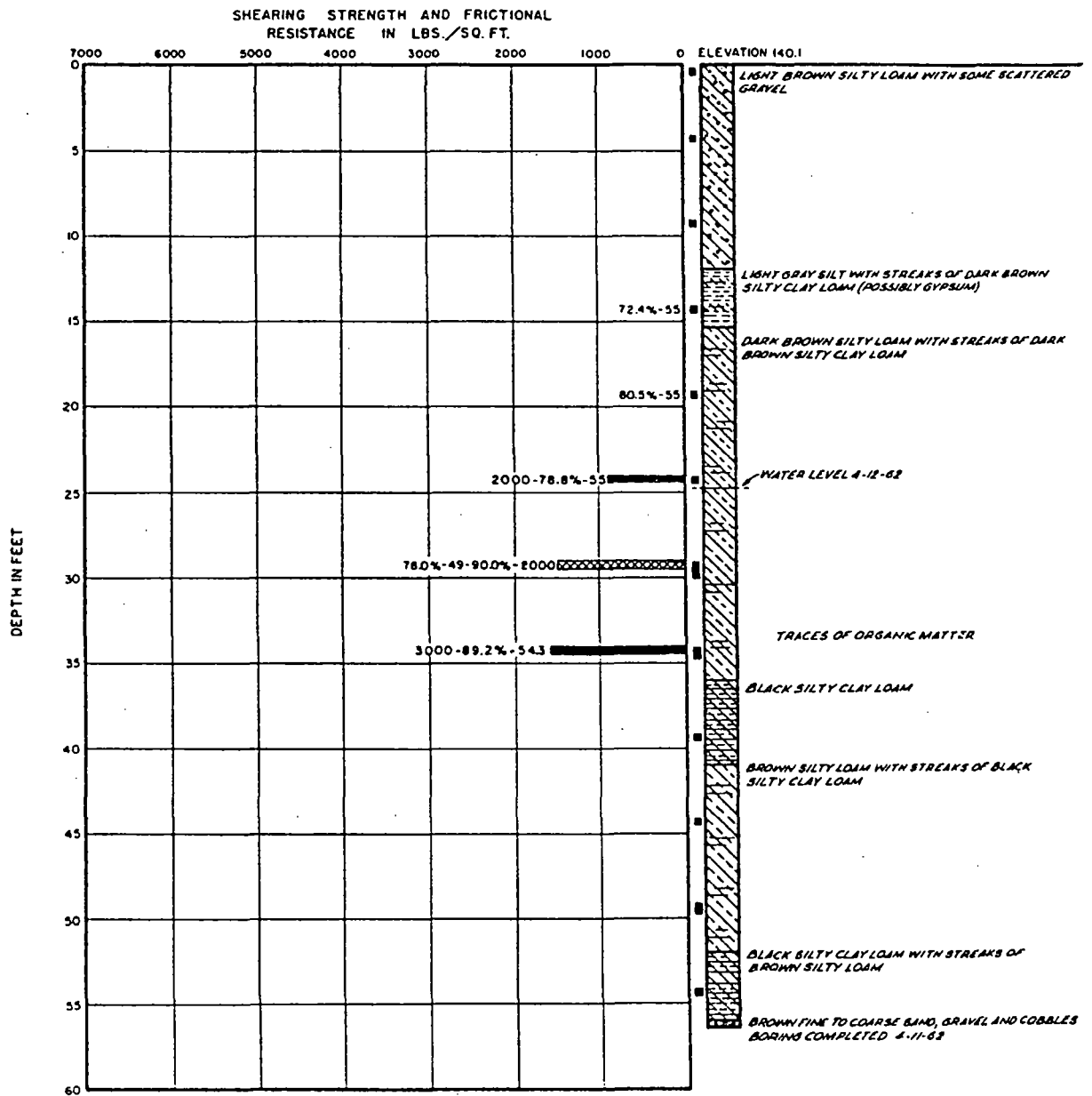
LOG OF BORINGS

BORING 6



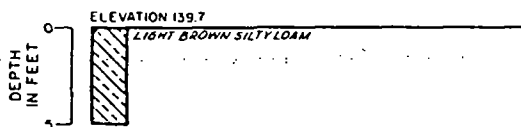
LOG OF BORINGS

BORING 7

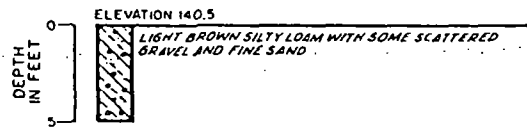


LOG OF BORINGS

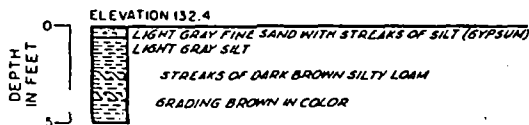
BORING A



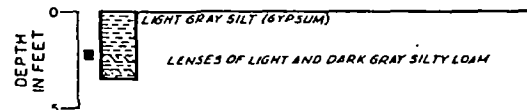
BORING B



BORING C



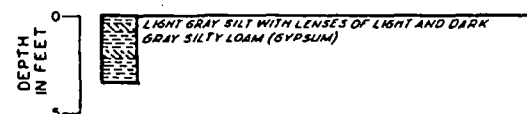
BORING D



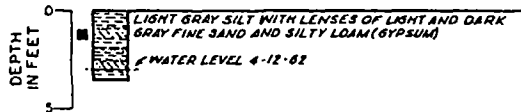
BORING E



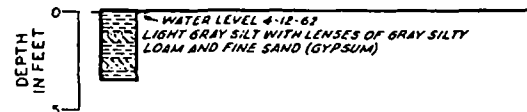
BORING F



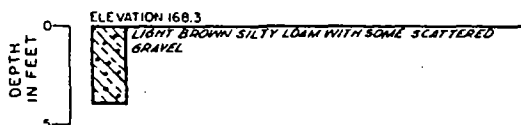
BORING G



BORING H



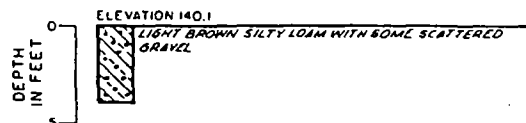
BORING K



BORING L



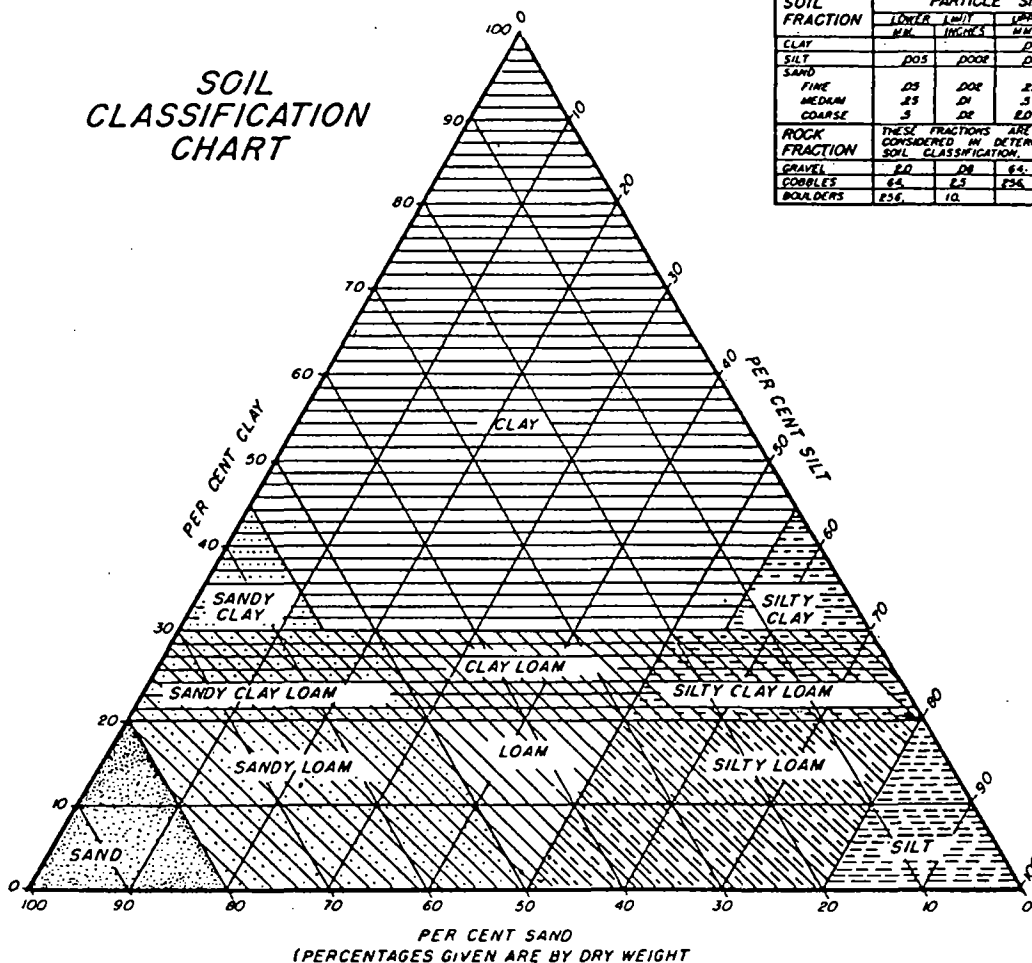
BORING M



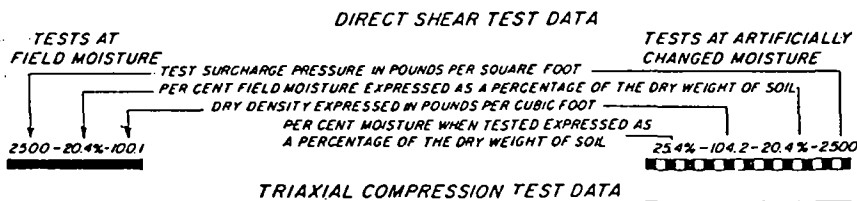
LOG OF BORINGS

SOIL CLASSIFICATION CHART

SOIL FRACTION	PARTICLE SIZE			
	LOWER LIMIT M.M.	UPPER LIMIT INCHES	LOWER LIMIT M.M.	UPPER LIMIT INCHES
CLAY				
SILT				
SAND				
FINE	.075	.002	.25	.43
MEDIUM	.25	.43	.43	.85
COARSE	.43	.85	.85	1.18
ROCK FRACTION	THESE FRACTIONS ARE NOT CONSIDERED IN DETERMINING SOIL CLASSIFICATION.			
GRAVEL	2.0	4.75	6.35	19.0
COBBLES	6.35	19.0	47.5	150.0
BOULDERS	19.0	150.0		



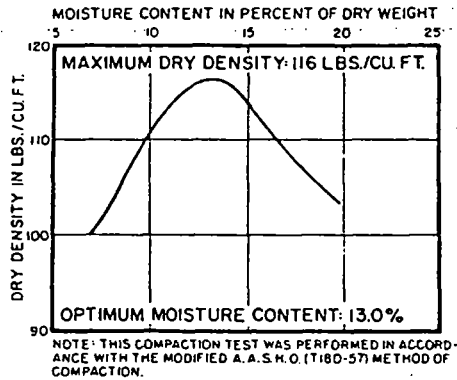
KEY TO TEST DATA



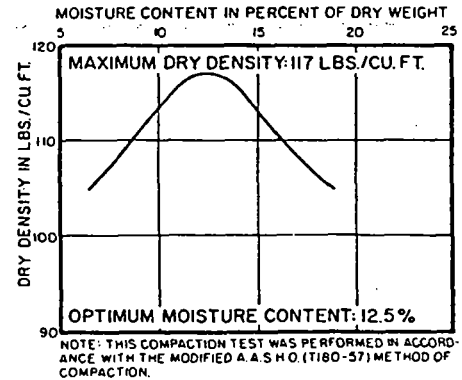
SOIL CLASSIFICATION CHART AND KEY TO TEST DATA

COMPACTION TEST DATA

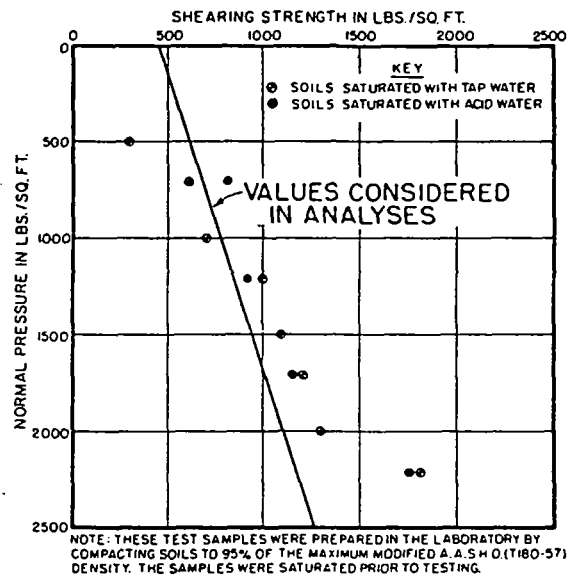
BORING B



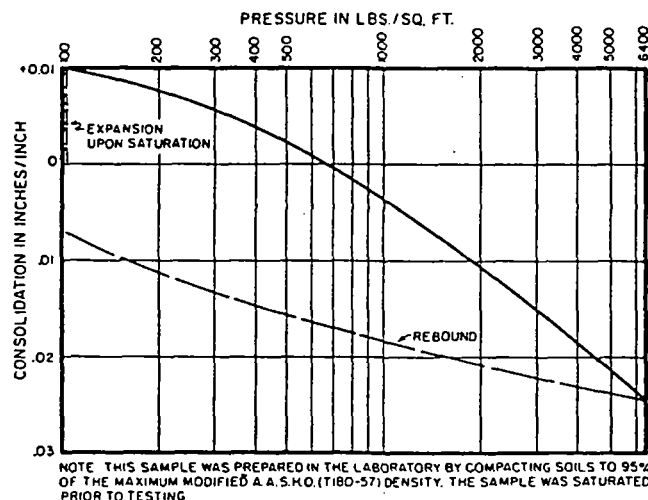
BORING K



SHEAR TEST DATA



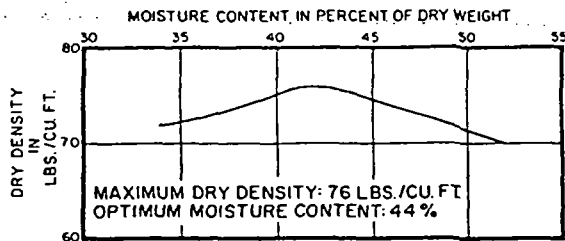
CONSOLIDATION TEST DATA



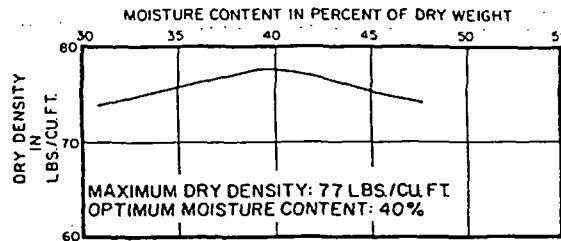
COMPACTION STUDIES
LIGHT BROWN SILTY LOAM
(NATURAL SOILS)

COMPACTION TEST DATA

BORING C

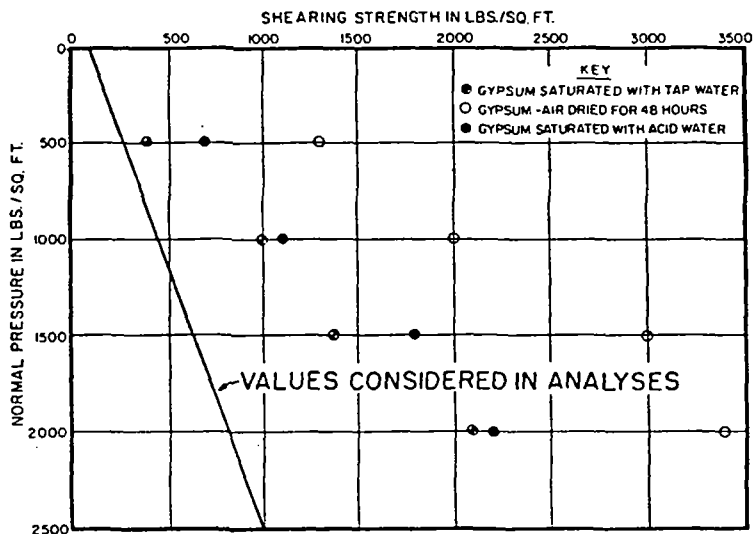


BORING F



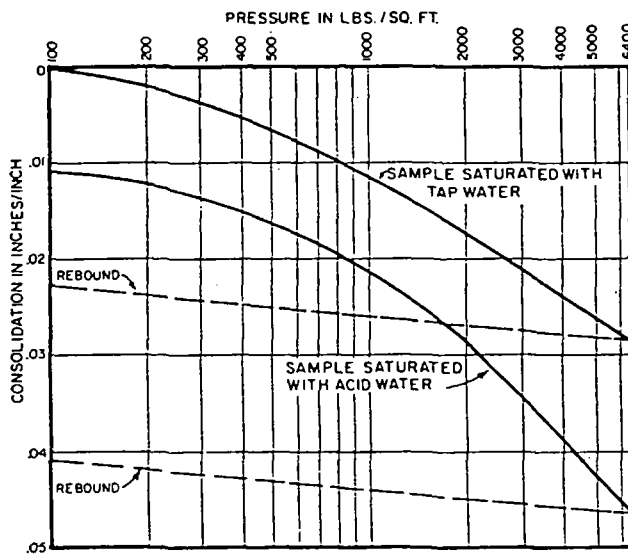
NOTE: THESE COMPACTION TESTS WERE PERFORMED IN ACCORDANCE WITH THE MODIFIED A.A.S.H.O. (T180-57) METHOD OF COMPACTION.

SHEAR TEST DATA



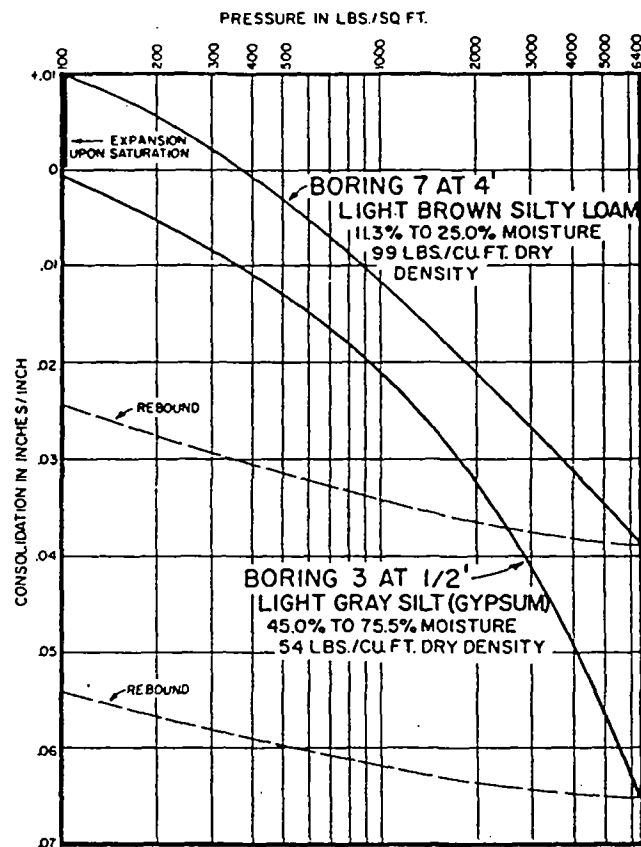
NOTE: THESE TEST SAMPLES WERE PREPARED IN THE LABORATORY BY COMPACTING SOILS TO 95% OF THE MAXIMUM MODIFIED A.A.S.H.O. (T180-57) DENSITY. THE SAMPLES WERE SATURATED PRIOR TO TESTING.

CONSOLIDATION TEST DATA



NOTE: THESE SAMPLES WERE PREPARED IN THE LABORATORY BY COMPACTING SOILS TO 95% OF THE MAXIMUM MODIFIED A.A.S.H.O. (T180-57) DENSITY. THE SAMPLES WERE SATURATED PRIOR TO TESTING.

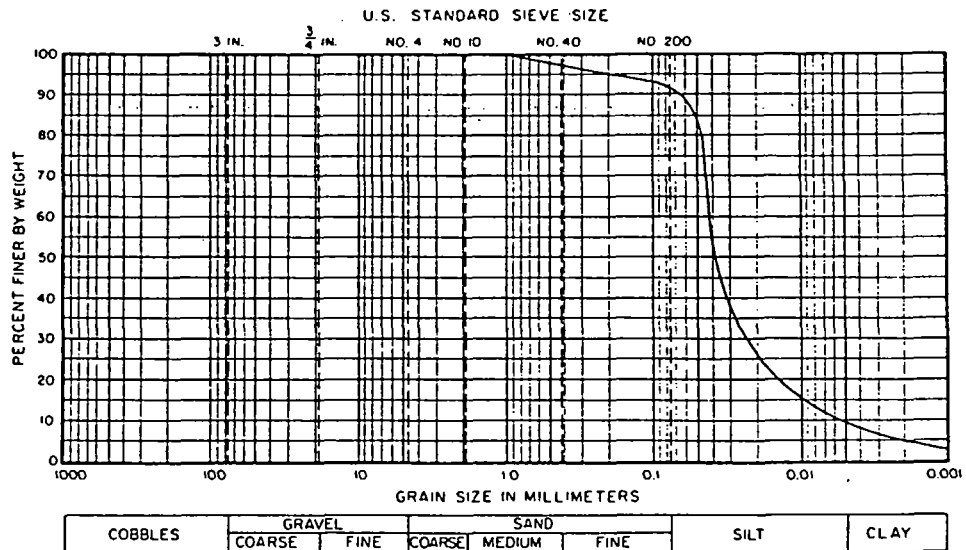
COMPACTION STUDIES LIGHT GRAY SILT (GYPSUM)



CONSOLIDATION TEST DATA

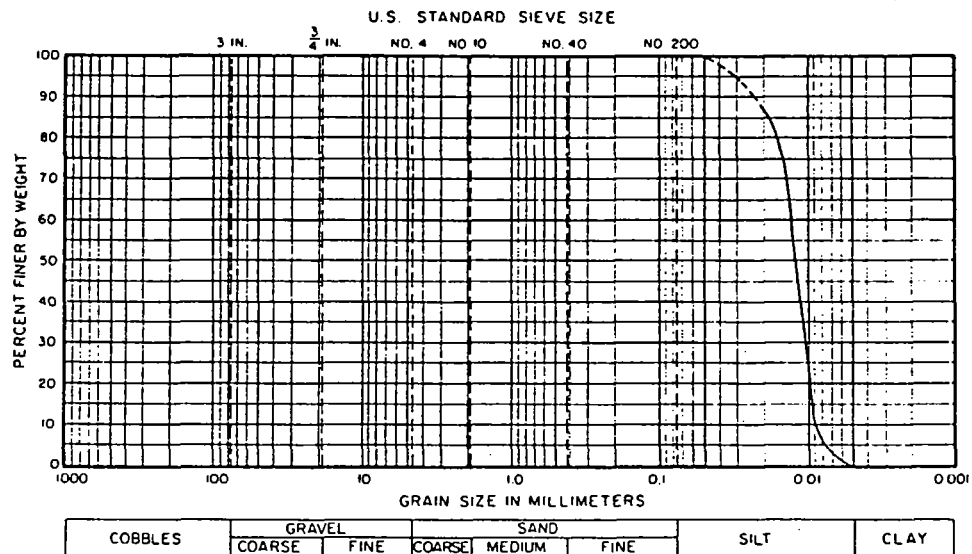
BORING 1 AT 4'

LIGHT BROWN SILTY LOAM



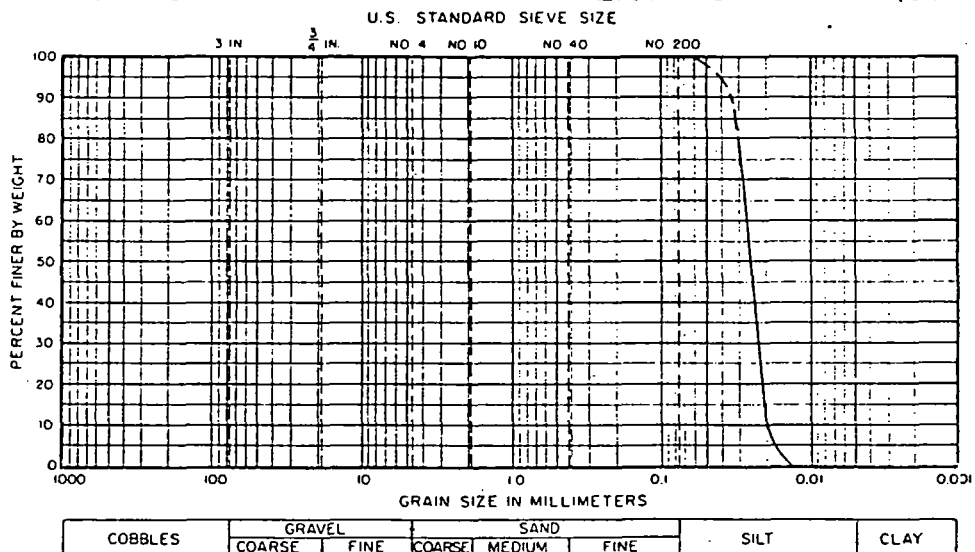
BORING 1 AT 39'

DARK BROWN SILT (GYPSUM)



BORING 3 AT 4'

LIGHT GRAY SILT (GYPSUM)

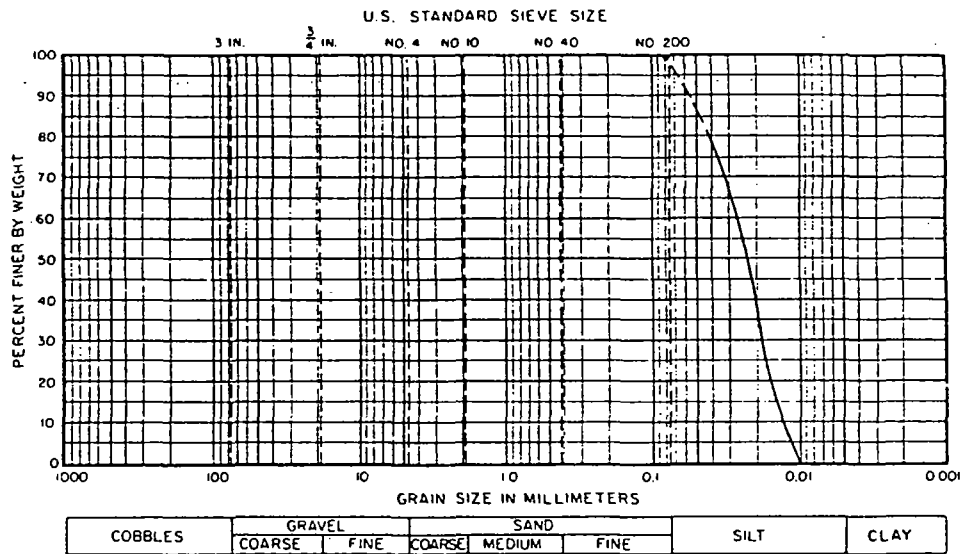


NOTE: DASHED PORTION OF CURVE
REPRESENTS ESTIMATED VALUE.

PARTICLE - SIZE DISTRIBUTION

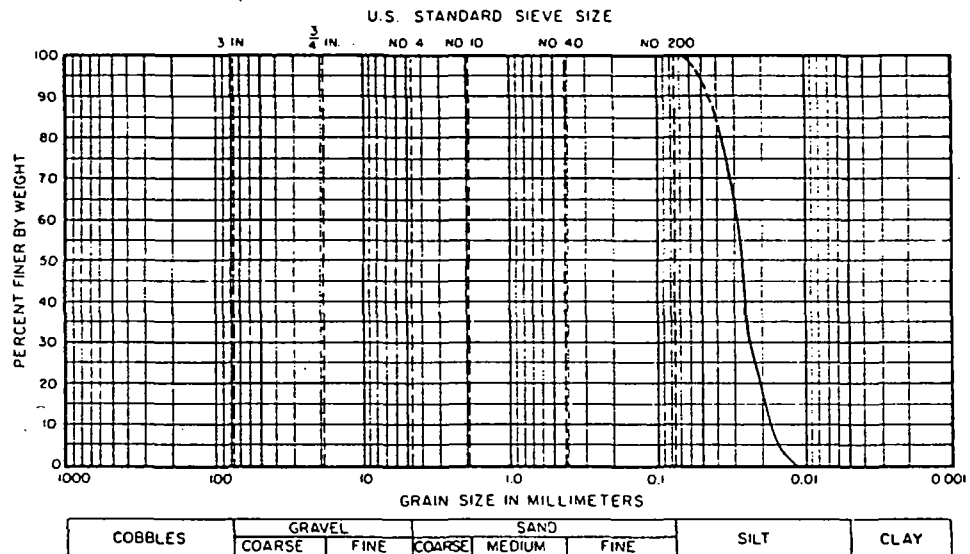
BORING 4 AT 14'

LIGHT GRAY SILT (GYPSUM)



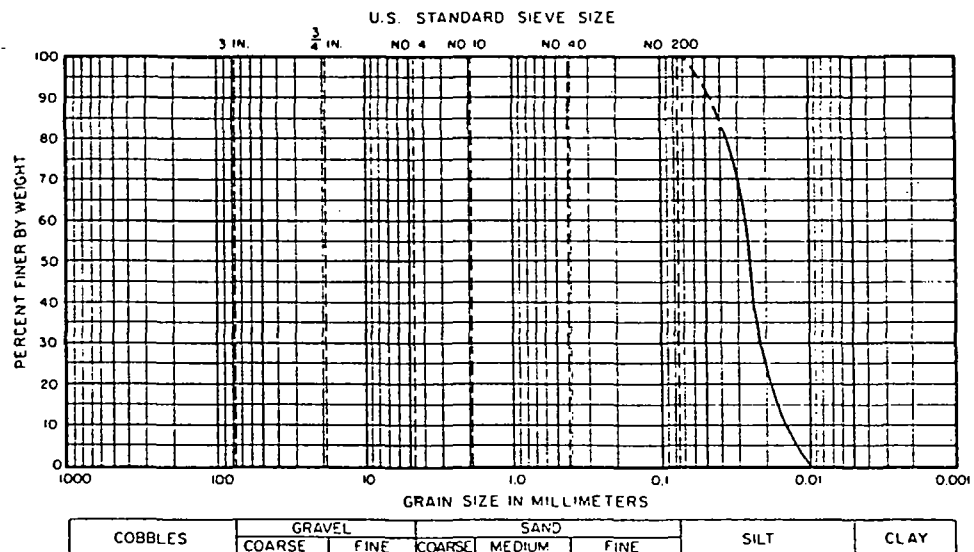
BORING D 0-3'

LIGHT GRAY SILT (GYPSUM)



BORING E 0-3 1/2'

LIGHT GRAY SILT (GYPSUM)

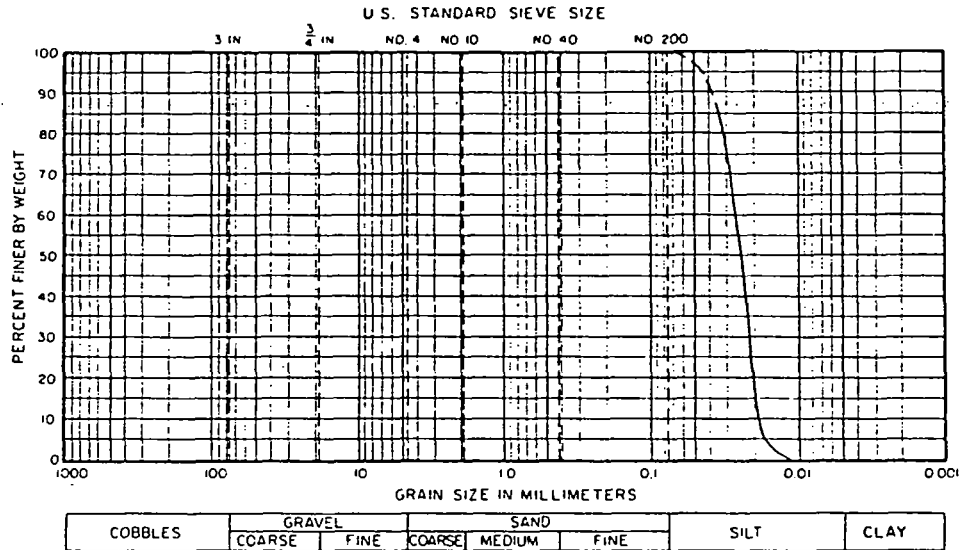


NOTE: DASHED PORTION OF CURVE
REPRESENTS ESTIMATED VALUE.

PARTICLE - SIZE DISTRIBUTION

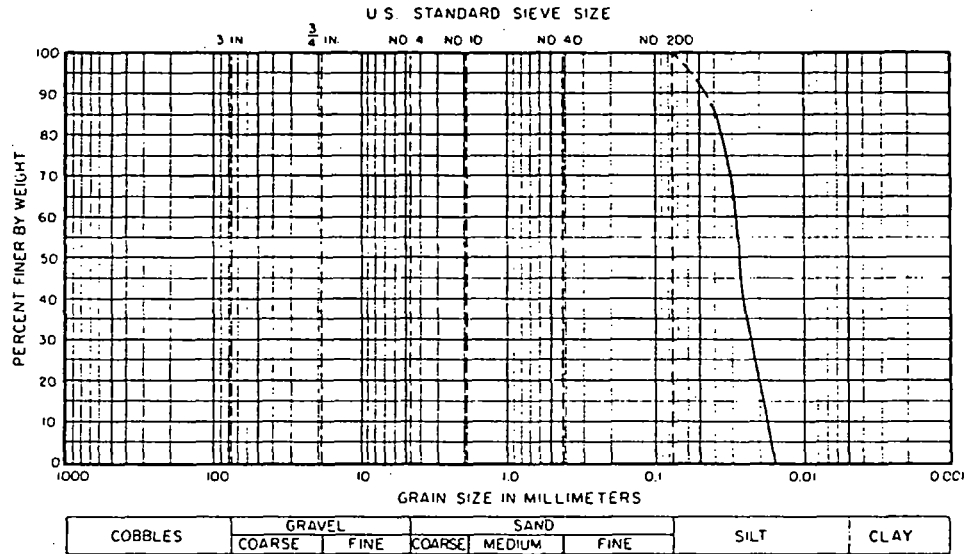
BORING F 0-3 1/2'

LIGHT GRAY SILT (GYPSUM)



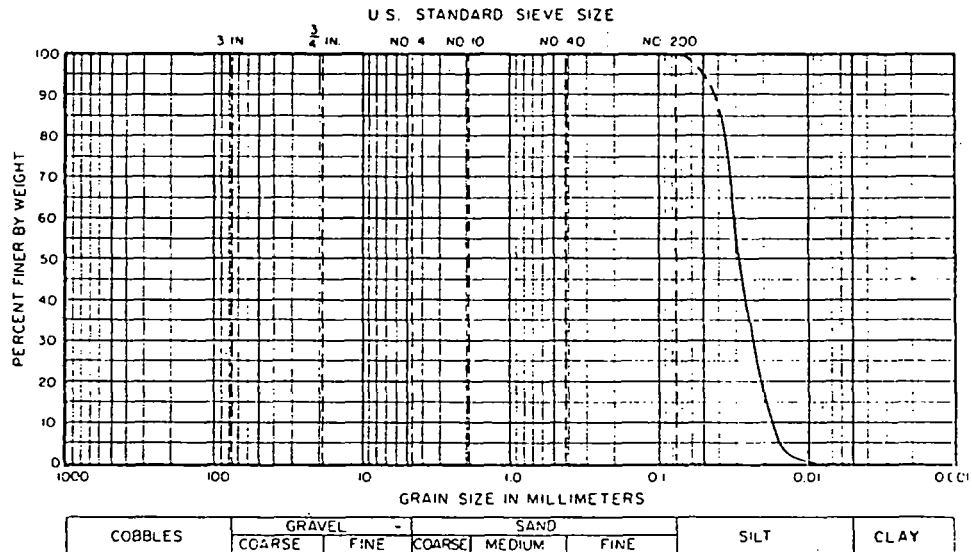
BORING G 0-3 1/2'

LIGHT GRAY SILT (GYPSUM)



BORING H 0-3 1/2'

LIGHT GRAY SILT (GYPSUM)



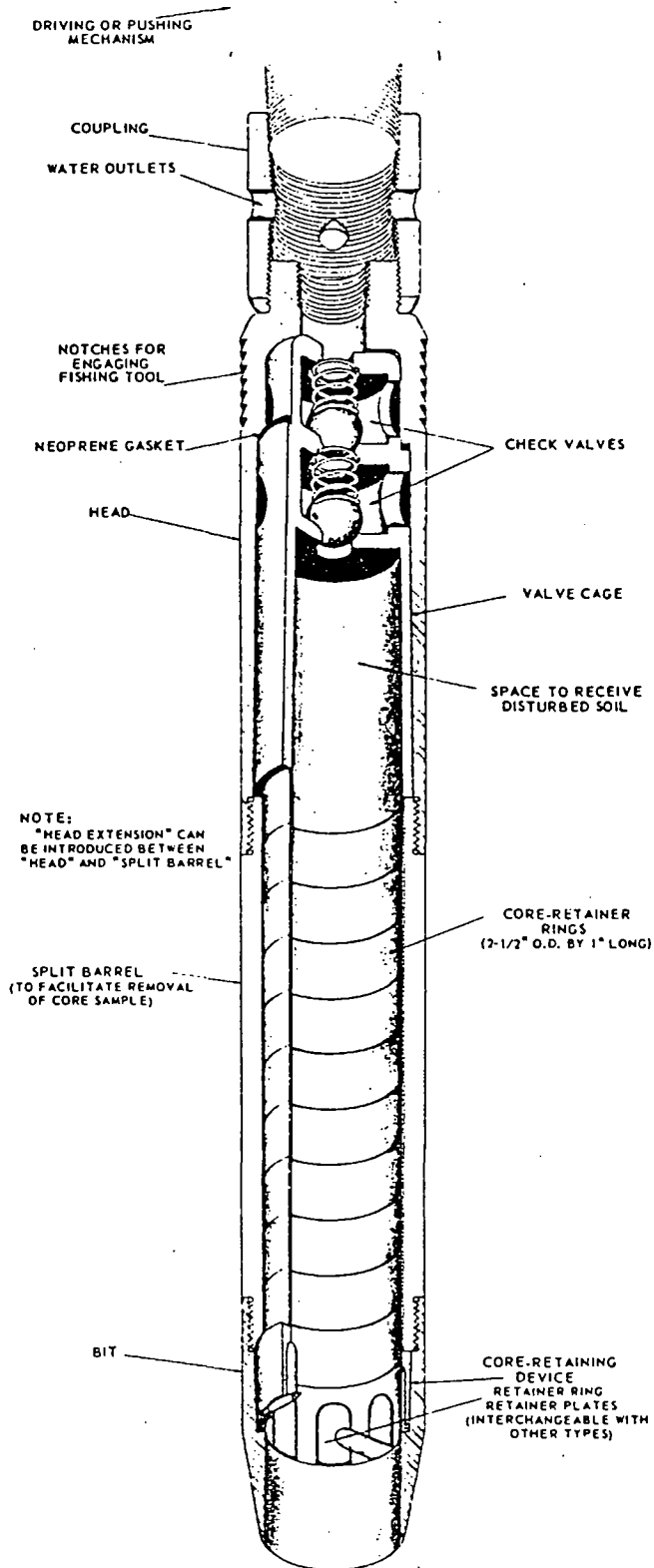
NOTE: DASHED PORTION OF CURVE
REPRESENTS ESTIMATED VALUE.

PARTICLE - SIZE DISTRIBUTION

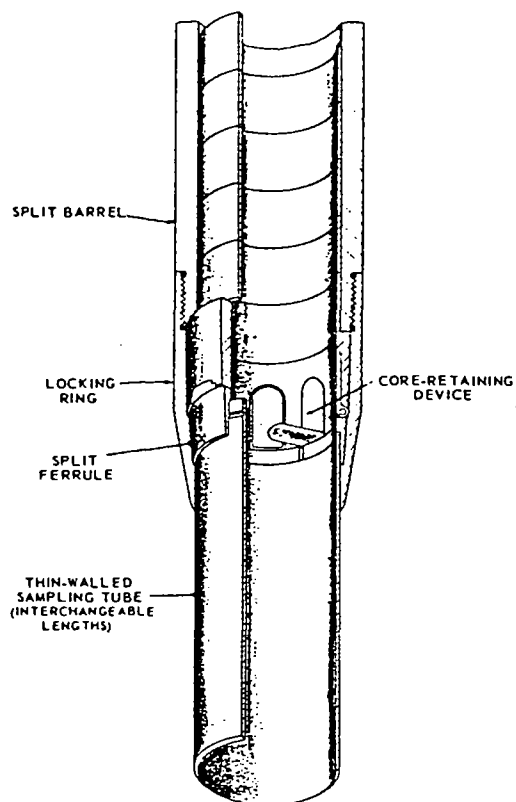
DAMES & MOORE
APPLIED EARTH SCIENCES

A-I

SOIL SAMPLER TYPE U FOR SOILS DIFFICULT TO RETAIN IN SAMPLER U. S. PATENT NO. 2,318,062

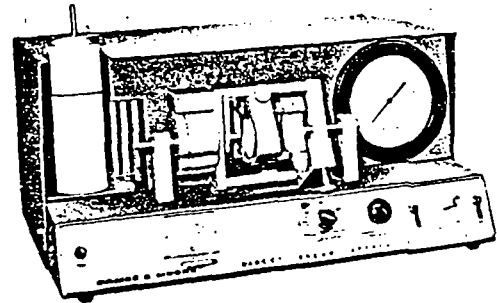


ALTERNATE ATTACHMENTS



METHOD OF PERFORMING DIRECT SHEAR AND FRICTION TESTS

DIRECT SHEAR TESTS ARE PERFORMED TO DETERMINE THE SHEARING STRENGTHS OF SOILS. FRICTION TESTS ARE PERFORMED TO DETERMINE THE FRICTIONAL RESISTANCES BETWEEN SOILS AND VARIOUS OTHER MATERIALS SUCH AS WOOD, STEEL, OR CONCRETE. THE TESTS ARE PERFORMED IN THE LABORATORY TO SIMULATE ANTICIPATED FIELD CONDITIONS.



DIRECT SHEAR TESTING
& RECORDING APPARATUS

EACH SAMPLE IS TESTED WITHIN THREE BRASS RINGS, TWO AND ONE-HALF INCHES IN DIAMETER AND ONE INCH IN LENGTH. UNDISTURBED SAMPLES OF IN-PLACE SOILS ARE TESTED IN RINGS TAKEN FROM THE SAMPLING DEVICE IN WHICH THE SAMPLES WERE OBTAINED. LOOSE SAMPLES OF SOILS TO BE USED IN CONSTRUCTING EARTH FILLS ARE COMPACTED IN RINGS TO PREDETERMINED CONDITIONS AND TESTED.

DIRECT SHEAR TESTS

A THREE-INCH LENGTH OF THE SAMPLE IS TESTED IN DIRECT DOUBLE SHEAR. A CONSTANT PRESSURE, APPROPRIATE TO THE CONDITIONS OF THE PROBLEM FOR WHICH THE TEST IS BEING PERFORMED, IS APPLIED NORMAL TO THE ENDS OF THE SAMPLE THROUGH POROUS STONES. A SHEARING FAILURE OF THE SAMPLE IS CAUSED BY MOVING THE CENTER RING IN A DIRECTION PERPENDICULAR TO THE AXIS OF THE SAMPLE. TRANSVERSE MOVEMENT OF THE OUTER RINGS IS PREVENTED.

THE SHEARING FAILURE MAY BE ACCOMPLISHED BY APPLYING TO THE CENTER RING EITHER A CONSTANT RATE OF LOAD, A CONSTANT RATE OF DEFLECTION, OR INCREMENTS OF LOAD OR DEFLECTION. IN EACH CASE, THE SHEARING LOAD AND THE DEFLECTIONS IN BOTH THE AXIAL AND TRANSVERSE DIRECTIONS ARE RECORDED AND PLOTTED. THE SHEARING STRENGTH OF THE SOIL IS DETERMINED FROM THE RESULTING LOAD-DEFLECTION CURVES.

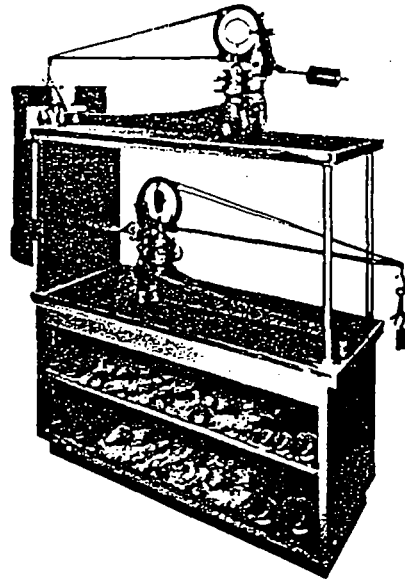
FRICTION TESTS

IN ORDER TO DETERMINE THE FRICTIONAL RESISTANCE BETWEEN SOIL AND THE SURFACES OF VARIOUS MATERIALS, THE CENTER RING OF SOIL IN THE DIRECT SHEAR TEST IS REPLACED BY A DISK OF THE MATERIAL TO BE TESTED. THE TEST IS THEN PERFORMED IN THE SAME MANNER AS THE DIRECT SHEAR TEST BY FORCING THE DISK OF MATERIAL FROM THE SOIL SURFACES.

METHOD OF PERFORMING CONSOLIDATION TESTS

Consolidation tests are performed to evaluate the volume changes of soils subjected to increased loads. Time-consolidation and pressure-consolidation curves may be plotted from the data obtained in the tests. Engineering analyses based on these curves permit estimates to be made of the probable magnitude and rate of settlement of the tested soils under applied loads.

Each sample is tested within a brass ring two and one-half inches in diameter and one inch in length. Undisturbed samples of in-place soils are tested in rings taken from the sampling tool in which the samples were obtained. Loose samples of soils to be used in constructing earth fills are compacted in rings to predetermined conditions and tested.



CONSOLIDATION MACHINES

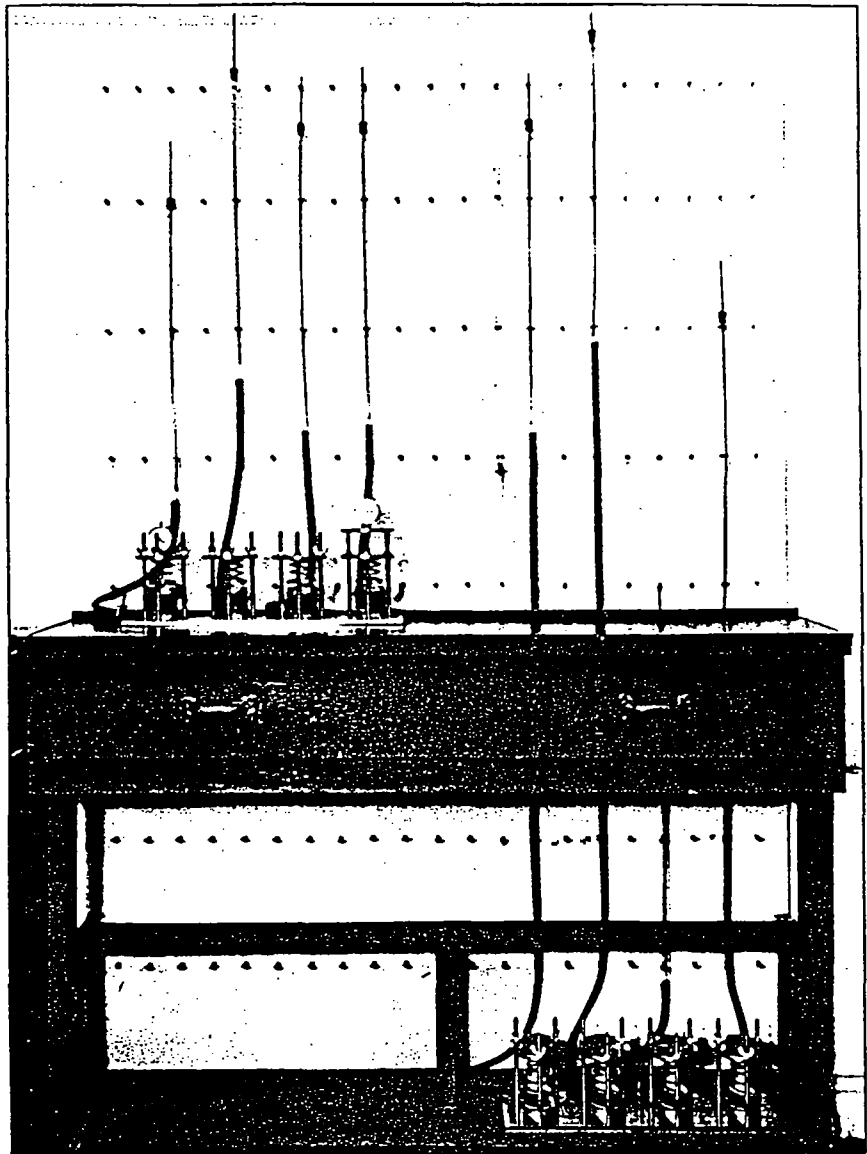
In testing, the sample is rigidly confined laterally by the brass ring. Axial loads are transmitted to the ends of the sample by porous disks. The disks allow drainage of the loaded sample. The axial compression or expansion of the sample is measured by a micrometer dial indicator at appropriate time intervals after each load increment is applied. Each load is ordinarily twice the preceding load. The increments are selected to obtain consolidation data representing the field loading conditions for which the test is being performed. Each load increment is allowed to act over an interval of time dependent on the type and extent of the soil in the field.

Soils saturated in the field are tested submerged in water. The effect of increased moisture content on partially saturated soils is determined by adding water to the sample during the test.

METHOD OF PERFORMING PERCOLATION TESTS

The quantity and the velocity of flow of water which will escape through an earth structure or percolate through soil are dependent upon the permeability of the earth structure or soil. The permeability of soil has often been calculated by empirical formulas but is best determined by laboratory tests, especially in the case of compacted soils.

A one-inch length of the core sample is sealed in the percolation apparatus, placed under a confining load, or surcharge pressure, and subjected to the pressure of a known head of water. The percolation rate is computed from the measurements of the volume of water which flows through the sample in a series of time intervals. These rates are usually expressed as the velocity of flow in feet per year under a hydraulic gradient of one and at



APPARATUS FOR PERFORMING PERCOLATIONS TESTS

Shows tests in progress on eight samples simultaneously.

a temperature of 20 degrees Centigrade. The rate so expressed may be adjusted for any set of conditions involving the same soil by employing established physical laws. Generally, the percolation rate varies over a wide range at the beginning of the test and gradually approaches equilibrium as the test progresses.

During the performance of the test, continuous readings of the deflection of the sample are taken by means of micrometer dial gauges. The amount of compression or expansion, expressed as a percentage of the original length of the sample, is a valuable indication of the compression of the soil which will occur under the action of load or the expansion of the soil as saturation takes place.

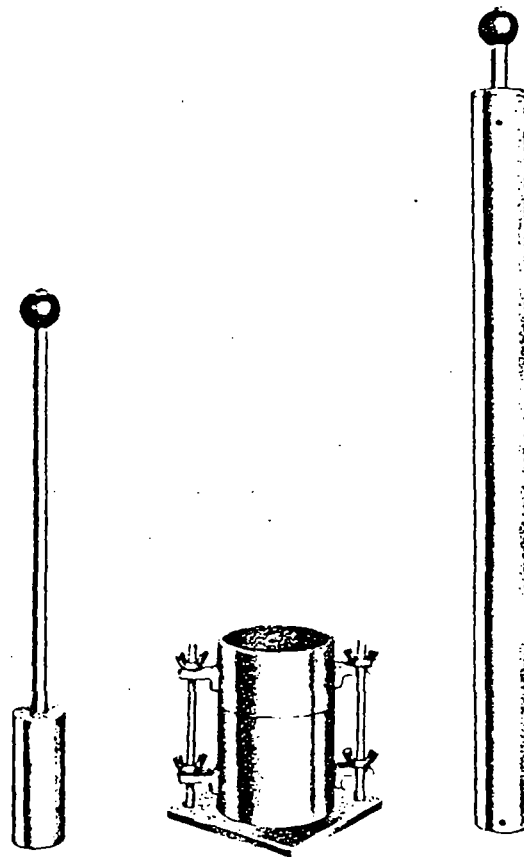
METHOD OF PERFORMING COMPACTION TESTS
(STANDARD AND MODIFIED A.A.S.H.O. METHODS)

IT HAS BEEN ESTABLISHED THAT WHEN COMPACTING EFFORT IS HELD CONSTANT, THE DENSITY OF A ROLLED EARTH FILL INCREASES WITH ADDED MOISTURE UNTIL A MAXIMUM DRY DENSITY IS OBTAINED AT A MOISTURE CONTENT TERMED THE "OPTIMUM MOISTURE CONTENT," AFTER WHICH THE DRY DENSITY DECREASES. THE COMPACTION CURVE SHOWING THE RELATIONSHIP BETWEEN DENSITY AND MOISTURE CONTENT FOR A SPECIFIC COMPACTING EFFORT IS DETERMINED BY EXPERIMENTAL METHODS. TWO COMMONLY USED METHODS ARE DESCRIBED IN THE FOLLOWING PARAGRAPHS.

FOR THE "STANDARD A.A.S.H.O." (A.S.T.M. D698-58T & A.A.S.H.O. T99-57) METHOD OF COMPACTION A PORTION OF THE SOIL SAMPLE PASSING THE NO. 4 SIEVE IS COMPACTED AT A SPECIFIC MOISTURE CONTENT IN THREE EQUAL LAYERS IN A STANDARD COMPACTION CYLINDER HAVING A VOLUME OF $1/30$ CUBIC FOOT, USING TWENTY-FIVE 12-INCH BLOWS OF A STANDARD 5-1/2 POUND RAMMER TO COMPACT EACH LAYER.

IN THE "MODIFIED A.A.S.H.O." (A.S.T.M. D-1557-58T & A.A.S.H.O. T 180-57) METHOD OF COMPACTION A PORTION OF THE SOIL SAMPLE PASSING THE NO. 4 SIEVE IS COMPACTED AT A SPECIFIC MOISTURE CONTENT IN FIVE EQUAL LAYERS IN A STANDARD COMPACTION CYLINDER HAVING A VOLUME OF $1/30$ CUBIC FOOT, USING TWENTY-FIVE 18-INCH BLOWS OF A 10-POUND RAMMER TO COMPACT EACH LAYER. SEVERAL VARIATIONS OF THESE COMPACTION TESTING METHODS ARE OFTEN USED AND THESE ARE DESCRIBED IN A.A.S.H.O. & A.S.T.M. SPECIFICATIONS.

FOR BOTH METHODS, THE WET DENSITY OF THE COMPACTED SAMPLE IS DETERMINED BY WEIGHING THE KNOWN VOLUME OF SOIL; THE MOISTURE CONTENT, BY MEASURING THE LOSS OF WEIGHT OF A PORTION OF THE SAMPLE WHEN OVEN DRIED; AND THE DRY DENSITY, BY COMPUTING IT FROM THE WET DENSITY AND MOISTURE CONTENT. A SERIES OF SUCH COMPACTIONS IS PERFORMED AT INCREASING MOISTURE CONTENTS UNTIL A SUFFICIENT NUMBER OF POINTS DEFINING THE MOISTURE-DENSITY RELATIONSHIP HAVE BEEN OBTAINED TO PERMIT THE PLOTTING OF THE COMPACTION CURVE. THE MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT FOR THE PARTICULAR COMPACTING EFFORT ARE DETERMINED FROM THE COMPACTION CURVE.



SOME APPARATUS FOR PERFORMING COMPACTION TESTS
Shows, from left to right, 5-1/2 pound rammer (sleeve controlling 12" height of drop removed), $1/30$ cubic-foot cylinder with removable collar and base plate, and 10 pound rammer within sleeve.

APPENDIX B

HISTORICAL SKETCH OF GYPSUM STORAGE POND

(Submitted by the J. R. Simplot Company)

1953 and 1954

An old gravel pit approximately 30 feet deep was divided into two equal sections. Gypsum was placed first in one section and then the other. In both cases, it entered the ponds at their southwest corners. During these early days, the plant production was such that the two ponds were never completely filled until 1955.

1955

The same two ponds as mentioned in the above paragraph were used alternately. When the ponds were nearly full, one pond was used while the other pond was allowed to set and dry. The dry pond was then excavated to approximately the bottom of the original gravel pit. When the pond was excavated, the gypsum would be diverted into it and the second pond would be allowed to dry and be excavated. The gypsum was allowed to enter both ponds near their southwest corners.

1956

The same procedure was followed as that of 1955.

1957

The same procedure was followed during 1957 as was followed in 1955 with the exception that a more comprehensive method of excavating was used.

1958

Gypsum was deposited into the two ponds again from the southwest corner. A 10-foot dike was constructed on the west, north, and east sides of the gypsum pond from borrowed material. This would make the top of the dike have an elevation of approximately 113 feet.

1959

The gypsum pond was again operated as two ponds except that the dividing dike was opened so that the two ponds behaved as one. The gypsum entered the gypsum pond at the west side. A dike 9 feet high was built from borrowed material. The elevation at the top of the dike was approximately 122 feet.

1960

The gypsum pond was divided into two separate ponds and the gypsum entered these ponds from the west, north, and east perimeter, the object being to keep the water to the south against the foothills and away from the dike. The dike was raised approximately 8 feet with borrowed material. The elevation of the top of the dike was approximately 130 feet. In October of 1960, a failure occurred near the northeast corner of the dike. It was the general opinion that the cause of the failure was water flowing through a seam of gypsum, thus causing erosion of the dike.

1961

February of 1961 the phosphate rock calciner was put into operation. Gypsum entered the two gypsum ponds on the west, north, and east perimeter, again attempting to keep the water to the south against the foothills and away from the dike. The dike on the east end of the pond was raised to an elevation equal to the remainder of the pond and an extension to the pond was constructed on the southwest end of the pond. The main dike elevation remained at approximately 130 feet.

1962

Gypsum was discharged into the two ponds from the west, north, and east perimeter, again attempting to keep the water to the south against the foothills and away from the dike. The dike was raised approximately 10

feet with borrowed material. The elevation of the top of the dike was approximately 140 feet. In April of 1962, Dames & Moore, Consulting Soils Engineers, started an investigation of the gypsum pond dike.

APPENDIX C

SUGGESTED SPECIFICATIONS FOR PLACING EMBANKMENT FILLS

SCOPE OF WORK

The work under these specifications includes the furnishing of all labor, tools, materials and equipment necessary for the placing of embankment fills in accordance with the applicable plans and specifications.

FILL MATERIALS

Fill materials shall be obtained from sources as directed by the Engineer or Owner. The materials will consist of natural silty materials from adjacent foothills.

COMPACTED FILL REQUIREMENTS AND PLACEMENT OF FILL

All embankment fills should be compacted to a dry density equal to at least 85 per cent of the maximum density determined in accordance with the Modified A.A.S.H.O.* (A.S.T.M. D 1557-57T and A.A.S.H.O. T 180-57) Method of Compaction. This method is described on Page A-IV, Method of Performing Compaction Tests. The maximum density and optimum moisture content should be determined by the engineer on the basis of tests on the material to be used.

Compaction of fill layers in direct contact with soft gypsum will not be possible. To provide a working surface, the gypsum should be covered with approximately 18 inches of fill material before the beginning of compaction operations.

The fill soils should be placed in successive layers of a thickness that will result in a compacted layer approximately six to eight inches in thickness. If the soils are too dry, it will be necessary to add water in a manner that will permit uniform penetration into the soils. Cultivation or other methods may be required during the application of water in order

*American Association of State Highway Officials

to obtain a uniform moisture distribution. If the soils are too wet, a drying period will be necessary. Each layer of soil shall be subjected to sufficient compactive effort to achieve the required density.

Compacting of the fill materials by ponding, flooding, or jetting will not be permitted. Fill material should not be placed in water.

SOILS ENGINEER

The services of an inspecting engineer will be supplied by the Owner. The Engineer will be the representative of the Owner and shall have the responsibility to determine whether the filling operations are performed in accordance with the specifications.*

COMPACTION EQUIPMENT

The choice of compaction equipment is left to the discretion of the Contractor; however, the equipment used must be adequate for achieving the specified densities. It is anticipated that the use of smooth-wheeled rubber-tired compaction equipment will work well for the type of soils to be placed.

ACCEPTANCE OF FILL

The Engineer shall be responsible for the acceptance of the fill material used by the Contractor. The Contractor should not proceed with the filling operations until approval has been obtained.

Adequacy of compaction shall be determined by the Engineer on the basis of in-place density determinations that are conducted while the fill is being placed. The results of these tests shall be the basis on which the satisfactory completion of the work is judged.

*If desired, Dames & Moore can instruct a member of the Simplot staff in procedures appropriate to field checking.

RECOMMENDED PRESENT POND CONTROL PROGRAM
TAILINGS POND DEVELOPMENT

SIMPLOT PLANT
POCATELLO, IDAHO

FOR THE
J. R. SIMPLOT COMPANY

PRIOR EMBANKMENT CONTROL

The tailings pond has been developed in an area that at one time served as a gravel pit.

The perimeter embankment is constructed of materials borrowed from the hillside above the pond. A current borrow area is shown on the left of Photo 3 on Plate 4.

A typical cross section showing evolution in embankment development appears on Plate 6, Typical Cross Section. The plate was developed in conjunction with our 1962 studies. Prior to 1962, the embankment had developed to Elevation 140 at the perimeter configuration shown on Plate 6.

On the basis of soil studies by Dames & Moore in 1962, recommendations were advanced to flatten the upper portion of the slope to 3 to 1 and to thereafter continue at that slope. To control the surface of ponded water, the recommendation was made to maintain the edge of water ponds at least 150 feet from the inside edge of the perimeter embankment. Effective control of ponded water by this criterion requires sufficient permeability in the gravel below the gypsum to permit water reaching the gravel through the gypsum deposit to drain from the pond area. Gravel normally provides permeability characteristics that are appreciably in excess of this design requirement.

In the meantime, the embankment has been increased in height. The recommendations have been substantially followed:

CURRENT PROBLEMS

EMBANKMENT FAILURE:

On April 29, 1963, soil displacement at the northwest corner of the pond was noted by plant personnel. Shortly thereafter, the displaced section was examined more fully and causes evaluated by a representative from Dames & Moore.

grades, tailings positions of ponds can be maintained at desired locations.

Objectives of "B" Water Control. If the discharge spigot is maintained at a given location for a sufficient length of time, a ground water mound builds up below the spigot. If the mound is not permitted to dissipate, the mound can be damaging to the embankment. Essentially, our studies indicated the need for control of such mounds.

From evaluation of permeability data developed from previous studies, the ground water pattern below a discharge spigot is expected to advance in the manner shown on Plate 11A, Ground Water Section After One Day of Discharge, and Plate 11B, Ground Water Section After 15 Days of Discharge. In general, rate of the advance of the ground water downward would be on the order of one to two feet per day.* After the level of "A" water is reached, the mound flows into the "A" water system. After the spigot source is cut off, the mound gradually lowers to the level of "A" water. The period of time required for dissipation would be approximately twice the period required for the ground water advance.

To avoid build-up of ground water mound, it is our recommendation that:

1. The period of application at any given spigot point be no longer than 15 days in order to prevent excess build-up of the ground water mound.
2. The period of absence of discharge from a given location be not less than 30 days in order to permit the ground water mound to dissipate.
3. The spacing between points of successive applications of spigots should be sufficient to prevent overlap of mounds.

*This rate reflects variations in measured permeability rates of samples of the gypsum.

If the below-pond gravel is functioning as anticipated, the equilibrium level will be below Elevation 105. If the equilibrium level is above Elevation 105, further methods of ground water control will be required.

As data are developed for the first well, observations should be started on successive wells as soon as they are completed. Outside of the failure zone, the observation should be directed to obtaining data on the rate of rise of ground water at a particular observation location in relation to the position of a spigot in that immediate vicinity. Similarly, the rate of lowering after removal of the spigot should also be observed.

Control heights for ground water at locations other than the present failure zone should correspond with a position not higher than 15 feet above the toe of the slope on the downgrade portion of the embankment, or above an angle of eight degrees with the horizontal, whichever results in the lowest elevation.

DRAINAGE CAPACITY:

As long as the drainage capacity of the gravel below the gypsum deposit remains in excess of the drainage capacity of the gypsum, seepage through the gypsum will be in direct proportion to the pond area covered by water. For the conditions shown on Plate 5, the total water area would be considered as the A' and A'' ponds plus the minor ponds B', B'' and B''', plus the area covered by the streams between the ponds. When the total area thus covered exceeds the shaded area shown in the center of Plate 5, all of the 900 gallons per minute will have been lost through the pond surface. Decanting reduces the size of ponded areas that would otherwise develop. Neglecting rainfall and evaporation, all water entering the pond that is not decanted, drains through the bottom of the pond. Currently, decanted water is drained into the Portneuf River.

at the time need is established.

LONG-RANGE PLANNING

GENERAL:

As the pond increases in height, the "A" water ponds will cover areas that are not underlain by gravel, but which are underlain by silty soils that are less permeable than the gypsum. Accordingly, ground water from the "A" ponds will follow the surface of the silty soils to drain into the present pond area. That condition is now rapidly developing as the A' and A'' ponds are forced upgrade by the deposition process.

These trends in effect place free water ponds against natural gully embankments that were not initially developed by natural processes to serve as dams to retain water. The effectiveness of such natural embankments in retaining water without failure will be dependent to a large degree by ground configurations and soil profiles at pond locations. Because of these considerations, details of long-range planning will be influenced not only by the current working criteria for pond development, but also by the specific terrain features on and near the area to be covered by tailings in the foreseeable future. In view of these considerations, the five-step program as set forth on Plate 2 has been developed for long-range planning.

Essentially, as soon as control of the present pond has been accomplished, topographic data should be developed for the area to be covered by the pond in the foreseeable future. All drainage channels immediately adjoining the pond area should be mapped. A contour interval not greater than five feet is recommended. After a tentative layout has been made, a review by Dames & Moore is recommended to detect any adjustments appropriate to conditions resulting from specific terrain conditions.

REPORT OF PROJECT PLANNING

PROPOSED TAILINGS POND (TP-K 2.1)
POCATELLO, IDAHO

FOR THE J. R. SIMPLOT COMPANY

The samples were tested at a surcharge pressure (pressure applied normal to the ends of the sample) corresponding with the approximate weight of overburden existing at the time of sampling. Selected samples were also tested at an increased surcharge pressure to determine the angle of internal friction of the soils.

The samples were tested at field moisture content. Selected samples were also tested at an increased moisture content corresponding to saturated conditions.

A load-deflection curve was plotted for each test and the shearing strength determined from this curve.

The results of the shear tests, together with the associated moisture and density determinations are presented on the left of the boring logs in a manner described on the Key to Test Data on Plate A-2. The data are summarized on the lower portion of Plate A-3, Summary of Test Data, In-Place Soils.

CONSOLIDATION TESTS:

Consolidation tests were performed on selected samples to provide data for determining the amount and rate of settlement at this site. These tests were conducted in accordance with the Method of Performing Consolidation Tests described on Page A-III. The results obtained are presented on the upper portion of Plate A-3.

PERCOLATION TESTS:

To determine the rate of percolation of water through the in-place soils, percolation tests were performed on selected undisturbed samples of the in-place soils. The tests were performed in accordance with the procedure outlined on Page A-IV, Method of Performing Percolation Tests.

Percolation Tests. To obtain and evaluate data regarding the imperviousness of the fine-grained soils, percolation tests were performed in the laboratory on prepared cores of each type of soil. The cores were prepared by compacting the sample to 85, 90 and 95 percent of the maximum density determined by the compaction method outlined above. Percolation tests were performed in accordance with the procedure outlined on Page A-IV in Appendix A. The results of the tests are tabulated below. The data are expressed in terms of surface drawdown in feet per year under a hydraulic gradient of one for a temperature of 20 degrees centigrade.

<u>Soil Type</u>	<u>Percent Compaction</u>	<u>Coefficient of Permeability in Feet Per Year (K)</u>
Sandy Loam	85	27.8
Sandy Loam	90	20.3
Sandy Loam	95	4.3
Silt	85	33.4
Silt	90	28.5
Silt	95	5.4

Shear Tests. To provide data to be used in determining the stability of embankments, direct shear tests were performed on compacted cores of each type of soil. The cores were compacted to 90 percent of the maximum density previously described. Samples were tested at both optimum and saturated moisture conditions. To determine the internal angle of friction of the compacted soils, shear tests were performed at varying surcharges. The tests were performed in accordance with the Method of Performing Direct Shear and Friction Tests described on Page A-II of Appendix A.

The results of the percolation tests on the in-place soils are tabulated below:

<u>Test Pit Number</u>	<u>Depth in Feet</u>	<u>Soil Type</u>	<u>Permeability Rate in Feet Per Year (K)</u>
2	13½	Silt	163
6	2	Silt	6
10	2½	Silt	87
11	7	Silt	218
12	4	Silt	158
17	3	Silt	191
18	5	Silt	123
19	4	Silt	208

The data are presented in terms of surface drawdown in feet per year under a hydraulic gradient of one at a temperature of 20 degrees centigrade.

o o o

The following Plates are attached and complete this Appendix:

Plate A-1A - Log of Borings (Boring 1)

Plate A-1B - Log of Borings (Borings 2 and 3)

Plate A-1C - Log of Borings (Borings 4 and 5)

Plate A-1D - Log of Test Pits (Test Pits 1 through 4)

Plate A-1E - Log of Test Pits (Test Pits 5 through 8)

Plate A-1F - Log of Test Pits (Test Pits 9 through 12)

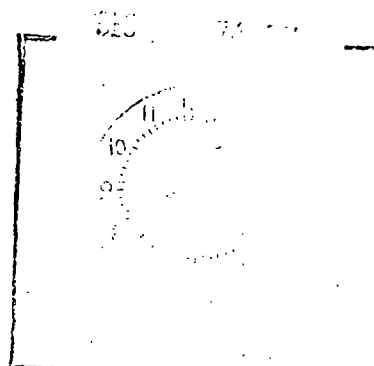
Plate A-1G - Log of Test Pits (Test Pits 13 through 16)

Plate A-1H - Log of Test Pits (Test Pits 17 through 20)

Plate A-2 - Soil Classification Chart and Key to Test Data

Plate A-3 - Summary of Test Data, In-Place Soils

REPORT OF INVESTIGATION AND DESIGN
PROPOSED EARTHFILL DIKES,
TAILINGS POND (TP-K2.1) EXPANSION
NEAR POCA TELLO, IDAHO
FOR J. R. SIMPLOT COMPANY



DAMES & MOORE JOB NO. 4048-020-06

EAST ABUTMENT CUTOFF - EAST DIKE:

Because of the fractured condition of the volcanic rock at the East abutment of the proposed East DiKE, we recommend that a cutoff trench be constructed to reduce seepage and to increase stability. The proposed cutoff trench is shown in profile on Plate 4, Plan and Profile, East DiKE, and is shown in section on Plate 6, Typical Section, Type 2. The maximum depth of the cutoff trench will depend on observations during construction inspection. During our field investigation, a test pit was excavated in the abutment to a depth of approximately 8 feet, with a tire-mounted backhoe. Required depths for the cutoff trench should be achieved by ripping and dozing without the use of explosives.

MATERIAL TYPES AND BORROW AREAS:

The two dikes, East and West, will be constructed of two on-site borrow materials, Zone 1 and Zone 2 fill, as shown on Plate 6, Typical Sections.

Zone 1 fill will be the main impervious body of the two dikes and will also be compacted into the cutoff excavation of the East DiKE. Zone 1 material is a silt with trace fine sand. Grain size analyses curves of Zone 1 material are presented on Plate A-4A through A-4C. Compaction characteristics of the Zone 1 fill are shown on Plate A-5, Compaction Test Data. Borrow sources for Zone 1 fill are found throughout the site. Proposed Zone 1 borrow areas are shown on Plate 3, Plot Plan.

Zone 2 fill will serve as upstream and downstream slope erosion protection. A minimum of 12 inches of Zone 2 fill will be required for erosion protection. Zone 2 fill is a coarse gravel and cobble mixture of

are shown on Plates A-4A through A-4C, Gradation Curves.

Atterberg Limits. To further aid in classifying the soils and to assist in determining soil characteristics, the liquid limit, plastic limit and plastic indexes of two selected soil samples were measured. The tests were performed according to the ASTM designation: D423-66 and D424-59 methods. Samples from Test Pits 4 and 7 at a depth of 3.0 feet were tested. Both were found to be non-plastic.

Compaction Tests. Compaction tests were performed on representative samples of soils taken from test pits in proposed borrow areas. The purpose of performing the compaction tests were to define the compaction characteristics of these representative soils to be used in the construction of the proposed dikes. After compaction characteristics were determined, recompacted samples of these soils were made in our laboratory to specifications that will be required for the construction of the dikes. These recompacted samples were then subject to several tests as described in the following paragraphs. The procedure used in obtaining the compaction characteristics are described on Plate A-5, Method of Performing Compaction Tests. Results of the compaction tests are presented on Plate A-6, Compaction Test Data.

Percolation Tests. Percolation tests were performed on representative undisturbed samples and on recompacted samples of soil which will be utilized in the construction of the proposed dikes. Tests were performed to provide data which were used in the calculations of surface runoff and the dissipation of surface runoff ponding. Tests were performed in accordance with the method described in Plate A-7, Method of

Performing Percolation Tests.

The degree of permeability is defined as follows: High - greater than 100,000 feet per year; medium - 100,000 to 1,000 feet per year; low - 1,000 to 10 feet per year; very low - 10 to 1 feet per year; and practically impermeable - less than .1 feet per year. Soils of high permeability are rarely encountered, and practically impervious soils, such as clays, are very common.

The results of the percolation tests are presented in tabular form below:

UNDISTURBED SAMPLES

<u>Test Pit Number</u>	<u>Depth in Feet</u>	<u>Soil Type</u>	<u>Permeability Rate (K) in Feet Per Year</u>	<u>Degree of Permeability</u>
2	5.5	ML	320	Low
2	9.0	ML	133	Low
3	5.0	ML	214	Low

RECOMPACTED SAMPLES

<u>Test Pit Number</u>	<u>Depth in Feet</u>	<u>Soil Type</u>	<u>Percent Compaction</u>	<u>Permeability Rate (K) in Feet Per Year</u>	<u>Degree of Permeability</u>
3	3.0	ML	90	8.5	Very Low
3	3.0	ML	89	4.7	Very Low
5	3.0	ML	90	21.7	Very Low
5	3.0	ML	89	31.0	Very Low

Consolidation Tests. To determine the amount of potential settlement, expansion or compressibility of the in situ soils at the site and the soils to be used in the construction of the proposed dikes, consolidation

Dames & Moore
Salt Lake City, Utah

April 14, 1987

Job No. 04048-042-18

REPORT

LABORATORY INVESTIGATION
EXISTING GYPSUM TAILINGS IMPOUNDMENT FACILITY
POCATELLO, IDAHO

FOR
THE J. R. SIMPLOT COMPANY

Dames & Moore



Exhibit #8

TABLE A-1

PERMEABILITY TEST RESULTS

<u>Material</u>	<u>Dry Density (pcf)</u>	<u>Permeability (cm/sec)</u>
Gypsum Slurry	56	$20:1 \begin{cases} 8 \times 10^{-5} \\ 4 \times 10^{-6} \end{cases}$
Calciner Clarifier	63	$20:1 \begin{cases} 4 \times 10^{-6} \\ 2 \times 10^{-7} \end{cases}$
Conda Mud	89	

As shown, the test results indicate a relatively wide range of permeability characteristics with the gypsum tailings being the most free draining.

TRIAXIAL COMPRESSION TESTS

A series of triaxial compression tests were performed on representative samples of the Conda Mud in accordance with the general procedures presented on Plate 3. This material was selected for the testing as a "worst case" condition based upon the results of the index tests. The series entailed testing on three individual samples. Each sample was formed as a slurry and consolidated under a different confining pressure (500, 1,000 and 2,000 pounds per square foot). A summary of the three tests is presented in tabular form on Plates 4A, 4B and 4C. The results of the tests are presented in graphical form on Plate 5. As shown, the test results indicate an "effective stress" and "total stress" angle of internal friction on the order of 36.5° and 22°, respectively.

CONSOLIDATION TESTS

A consolidation test was performed on reconstituted samples of the gypsum tailings and the Conda Mud. The tests were performed in general accordance with the procedures presented on Plate 6. In brief, the purpose of the tests was to evaluate the rate of consolidation for the two materials. This parameter could have a significant impact on the overall strength characteristics of a material particularly within a progressively expanding tailings impoundment. The rate is measured by the coefficient of consolidation, c_v which is presented for the two materials in tabular form on the following page.

feet are projected. In the event that any greater depositional thickness develops, Dames & Moore should be notified so that appropriate recommendations can be provided, if necessary.

An additional concern associated with the gradational variation in the proposed materials is the effect on the relative permeabilities. The results of our laboratory evaluation indicate that the permeability values vary by an excess of two orders of magnitude. This could significantly retard the vertical drainage characteristics of the impoundment and could cause the development of "perched" water levels within the embankment section. These perched levels could express themselves as seepage areas on the embankment face and could result in localized areas of instability.

In conclusion, the results of our analysis indicate that with the use of proper operational procedures the change of materials should not have a significant impact on the future operation of the facility. However, it is recommended that consideration be given to minimizing the degree of layering within the impoundment area. If possible the impact of the calciner clarifier underflow and the Conda Mud should be reduced by mixing with the gypsum tailings prior to deposition in the impoundment. If, in the future, areas of seepage are noted on the embankment face, Dames & Moore should be notified immediately so that appropriate remedial measures can be implemented.

SEISMIC STABILITY

It should be noted that the stability considerations discussed herein are based only on steady-state loading conditions. To date there has been no evaluation performed on the seismic stability of the impoundment. Recommendations for a proposed study were presented as Phase II in our proposal dated January 2, 1987.

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SALT LAKE CITY, UTAH

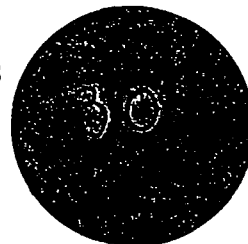
JOB NO. 04048-046-31

JANUARY 25, 1988

INVESTIGATION AND STABILITY ANALYSIS
OF TAILINGS POND NO. 2
J. R. SIMPLOT COMPANY'S
POCATELLO, IDAHO OPERATIONS

FOR

J. R. SIMPLOT COMPANY

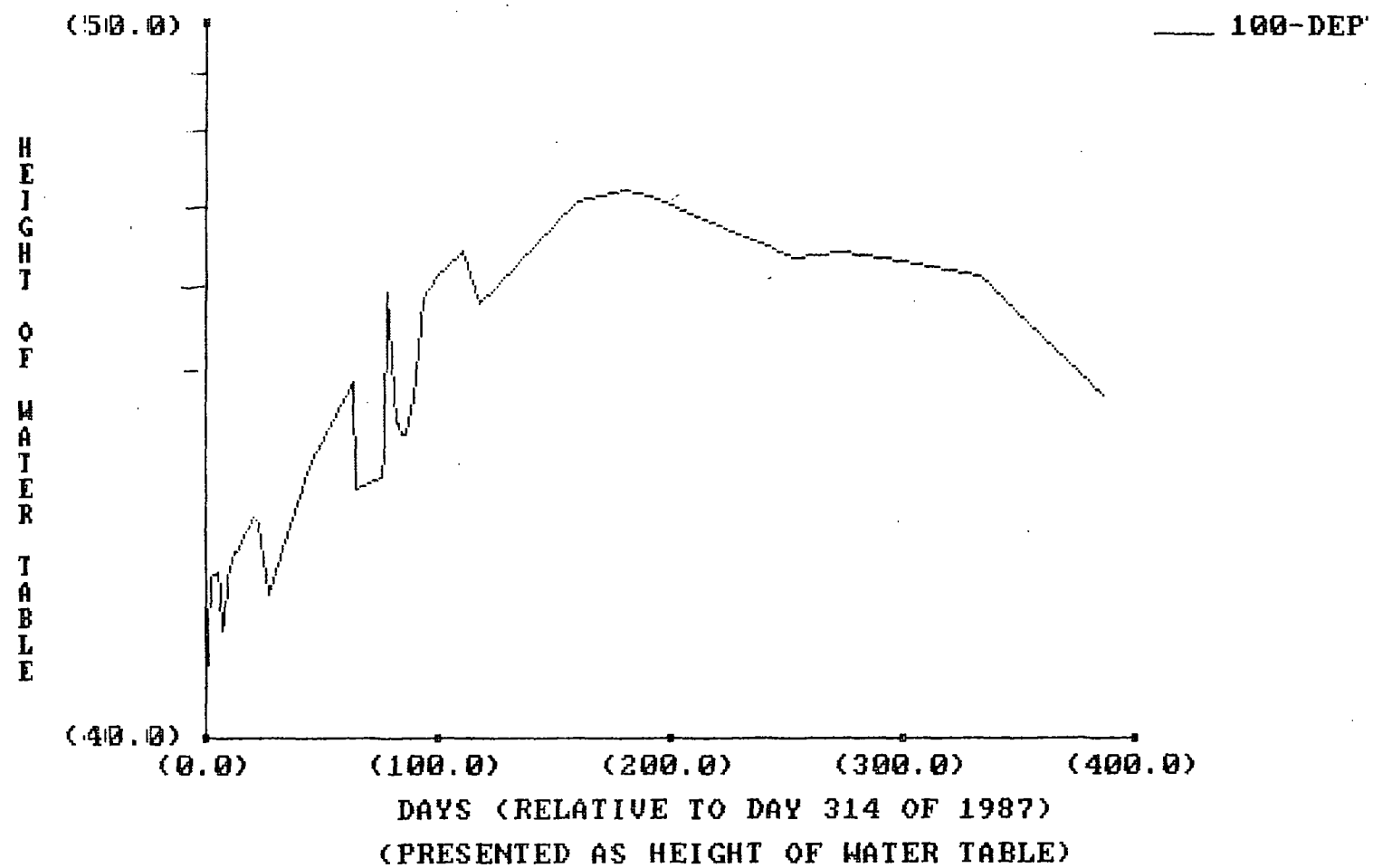


Dames & Moore



Exhibit #9

EAST GYP STACK PEISOMETER READINGS





J. R. Simplot Company
January 25, 1988
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GRAIN-SIZE ANALYSIS

Particle-size characteristics were evaluated through the performance of a hydrometer analysis on a representative sample of the uncalcined gypsum tailings. Analyses were performed in accordance with the procedures set forth under ASTM* D-422-83. A summary of these results are presented on Figure 6.

COMPACTION TEST

Due to the limited size of the sample available for testing a Harvard miniature compaction test was performed using a 40-lb spring and a 1-5/8-inch diameter compaction mold with materials being compacted in three lifts using 25 blows per layer. The results of this test are also presented on Figure 6.

PERMEABILITY TESTS

Coefficient of vertical hydraulic conductivity, i.e., vertical permeability was determined for a laboratory fabricated specimen of gypsum sedimented from a gypsum slurry. Materials were reslurried to a 40 percent density (weight basis) and sedimented in a column with bottom drainage. The specimen prepared for permeability testing had an initial dry unit weight of 52.9 pounds per cubic foot and a moisture content of 91.0 percent. Constant head coefficient of vertical hydraulic conductivity (permeability) determined for this specimen was 3.6×10^{-5} cm/sec.

CONSOLIDATION TEST

A consolidation test was performed on a fabricated laboratory sample sedimented from a 40 percent slurry of uncalcined gypsum tailings. Twenty-four hour values were selected for development of the strain-load relationship presented on Figure 7.

*American Society for Testing and Materials

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DISCUSSIONS AND CONCLUSIONS

MATERIAL HANDLING CHARACTERISTICS

Laboratory testing was performed to provide a basis to compare material handling characteristics of the uncalcined gypsum as those of gypsum deposited during previous facility operations. Laboratory data was extracted from previous Dames & Moore (references 1, 2 and 3) studies to form a basis for comparison. These data are summarized below in conjunction with data developed for uncalcined gypsum.

Summary of Laboratory Data

<u>Parameter</u>	<u>Calcined Gypsum*</u>	<u>Uncalcined Gypsum</u>
Specific Gravity - gm/cc	2.36	2.38
Atterberg Limits		
LL -	-	-
PI -	non-plastic	non-plastic
Grain Size		
P200 - %	87 - 100	80
D50 - mm	0.01 - 0.04	0.025
Compaction		
γ_{max} - pcf	79 - 88 **	69 ***
w_{opt} - %	42 - 22 **	30 ***
Permeability - cm/sec	4.8×10^{-4} - 1.9×10^{-5}	3.6×10^{-5}
Consolidation		
C_c -	0.10 - 0.17	0.10

* Combined data from 1965 and 1975 Dames & Moore Reports except as indicated otherwise.

** Based on ASTM D-1557 (AASHTO T-180) procedures.

*** Based on Harvard Miniature Compaction Test.

J. R. Simplot Company
January 25, 1988
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The data presented in the previous table suggest little to no significant difference in mechanical behavioral properties between calcined and uncalcined gypsum tailings produced at the Simplot, Pocatello Plant. The compaction, compressibility and permeability data suggest that material handling characteristics of the proposed uncalcined gypsum tailings should be approximately the same as those of the calcined tailings impounded and used in the construction of TP-2 as it stands today.

STRENGTH CHARACTERISTICS

Strength characteristics of the uncalcined gypsum tailings were defined by a series of triaxial compression tests performed on laboratory fabricated test specimens sedimented from a 40 percent solids (weight basis) slurry. Results of these tests when viewed in comparison to those of calcined gypsum indicate strength properties as follows:

	<u>Uncalcined Gypsum</u>	<u>Calcined Gypsum</u>
Total Friction Angle	27 degrees	20 degrees
Total Cohesion	180 psf	0 psf
Effective Friction Angle	41 degrees	36 degrees
Effective Cohesion	0 psf	0 psf

The strength parameters for calcined gypsum tailings were developed in previous Dames & Moore studies for J. R. Simplot. The values presented represent a conservative estimate based on a review of both triaxial and direct shear data developed for both Ponds 1 and 2.

These data, when compared, indicate that the strength properties of the uncalcined tailings tested exceed those of the calcined tails previously reported.

DAMES & MOORE
SALT LAKE CITY, UTAH

JOB NO. 04048-046-31

MARCH 16, 1988

SUMMARY REPORT
FOLLOW-UP INVESTIGATION AND LABORATORY TESTING
GYPSUM TAILINGS POND NO. 2
J. R. SIMPLOT COMPANY'S POCATELLO OPERATIONS
FOR
J. R. SIMPLOT COMPANY

Dames & Moore



Exhibit #10

J. R. Simplot Company
March 16, 1988
Page -4-

Results of partial grain-size determinations performed on representative samples of both UG and CG obtained from Test Pit 3 indicate 94.2 and 99.4 percent passing the No. 200 sieve, respectively.

Results of compaction tests performed on both UG and CG are presented below and graphically on Plate 1.

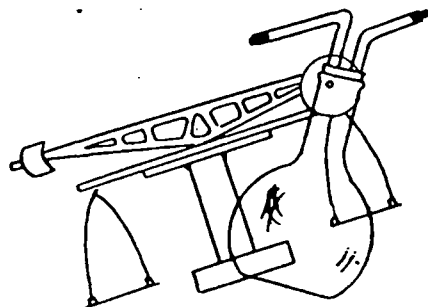
<u>Material</u>	<u>Maximum Dry Density pcf</u>	<u>Optimum Moisture %</u>
UG	66.4	45.4
CG	69.6	49.5

SUMMARY AND CONCLUSIONS

The moisture content data presented above suggest only minor behavioral differences between the calcined and uncalcined gypsum. The data exhibit the minor degree of variation that would be expected in a naturally deposited homogeneous soil. Dry density data show similar variation and suggest only minor behavioral characteristic differences.

Compaction test results suggest only minor behavioral differences between the two types of gypsum tested. These data do indicate, however, that the deeper gypsum strata sampled are presently significantly wet of the optimum moisture for compaction based on the ASTM D698 Standard.

Based on the results of our field observations and subsequent laboratory testing conducted as part of this investigation, no data have been developed to suggest that the material handling properties of the uncalcined gypsum should be significantly different from those of calcined gypsum.



Ford Chemical

LABORATORY, INC.

Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115

PHONE 466-8761

Xc: E. Mader

N. Self

K. Schiess

File 1480/2.9

1480.2.4

DATE: 05/30/90

CERTIFICATE OF ANALYSIS

J.R. SIMPLOT COMPANY
2L. WALKER-TECH SERV
P.O. BOX 912
POCATELLO, ID 83201

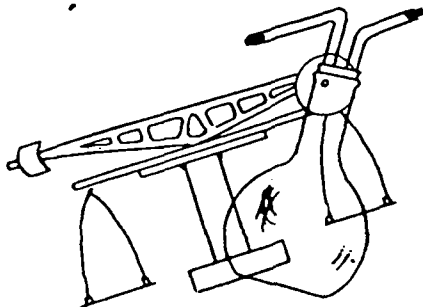
90-004358

SAMPLE: PIPELINE SLURRY SAMPLE RECEIVED 5-4-90 FOR E.P. TOXIC
ANALYSIS USING PROCEDURE SW846 FOR LEACHABLE METALS STARTING
AT 11 A.M. UNDER PO #87200-1040-D.

RESULTS

1-Arsenic as As mg/l EPA 7060	.01
1-Barium as Ba mg/l EPA 6010	.14
1-Cadmium as Cd mg/l EPA 7130	.11
1-Chromium as Cr mg/l EPA 7190	<.01
1-Lead as Pb mg/l EPA 7420	<.10
1-Mercury as Hg mg/l EPA 7470	<.001
1-Selenium as Se mg/l EPA 7740	<.01
1-Silver as Ag mg/l EPA 7760	<.01
1-pH Final Units	4.80
1-pH Initial Units	8.00
3-React. as H ₂ S mg/kg EPA 9030	<50.00
3-React. as HCN mg/kg EPA 9010	<10.00
Corrosivity pH EPA 9040	7.40

All reports are submitted as the confidential property of clients. Authorization for publication of our reports, conclusions, or, extracts from or regarding them, is reserved pending our written approval as a mutual protection to clients, the public and ourselves.



Ford Chemical

LABORATORY, INC.

Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115

PHONE 466-8761

PAGE: 2

CERTIFICATE OF ANALYSIS

90-006358

RESULTS

Ignitability EPA 1010	200
Liquid % E.P. Toxic SW 846	32.5
Solids % EP Toxic SW 846	67.5

RPS

FORD CHEMICAL LABORATORY, INC.

XC: N. Self
K. Schiess

DATE: 06/12/90

J.R. SIMPLOT COMPANY
%L.WALKER-TECH SERV
P.O. BOX 912
POCATELLO, ID 83201

90-006376

SAMPLE: CONDA PIPELINE LIQUOR SAMPLE RECEIVED 5-3-90 FOR ANALYSIS
STARTING AT 3 P.M. UNDER PG #87200-1040-0.

RESULTS

Alkalinity, CaCO ₃ mg/l SM403	176
Aluminum as Al mg/l SM 303C	.15
Ammonia, NH ₃ -N mg/l SM417G	1.89
Arsenic, As mg/l SM304	.007
Barium, Ba mg/l SM303C	.01
Beryllium as Be mg/l SM303A	.002
Bicarbonate, HCO ₃ mg/l SM403	215
Boron as B mg/l SM 404A	.29
Cadmium, Cd mg/l SM304	.007
Calcium, Ca mg/l SM303A	101.02
Carbonate as CO ₃ mg/l SM403	<.10
Chloride, Cl mg/l SM407A	24.0
Chromium, Cr mg/l EPA218.1	<.010

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CERTIFICATE OF ANALYSIS

PAGE: 2

90-006376

RESULTS

=====	=====
Cobalt as Co mg/l SM 303A	<.03
Cond. umhos/cm EPA 120.1	842
Copper, Cu mg/l SM303A	<.01
Cyanide Cn tot.mg/l EPA 335.2	<.010
Fluoride, F mg/l EPA 340.2	6.30
Hydroxide as OH mg/l SM 403	<.10
Iron, Fe mg/l SM303A	.22
Lead, Pb mg/l SM304	<.002
Lithium as Li mg/l	.02
Magnesium, Mg mg/l SM303A	16.52
Manganese, Mn mg/l SM303A	.18
Mercury, Hg mg/l SM320A	.0002
Molybdenum as Mo mg/l SM303C	1.59
Nickel, Ni mg/l SM303A	<.03
Nitrate, NO3-N mg/l SM418C	.17
Phosphorus Tot P mg/l EPA 365	3.20
Potassium, K mg/l SM303A	8.14


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PAGE: 3

90-006376

RESULTS

Residual Sodium Carbonate	- 2.874
Selenium, Se mg/l SM304	.004
Silica SiO2 (DIS) mg/l SM425A	33.28
Silver, Ag mg/l SM304	<.010
Sodium Absorption Ratio	1.511
Sodium, Na mg/l SM303A	62.13
Sulfate, SO4 mg/l EPA 375.2	253
Surfactants ppm SM512B	<.10
Tot.Dis.Solids mg/l EPA 160.1	804
Vanadium as V mg/l SM 303C	.29
Zinc, Zn mg/l SM303A	.08
pH Units EPA 150.1	7.30


FORD CHEMICAL LABORATORY, INC.

All reports are submitted as the confidential property of clients. Authorization for publication of our reports, conclusions, or, extracts from or regarding them, is reserved pending our written approval as a mutual protection to clients, the public and ourselves.

FORD ANALYTICAL LABORATORIES

CHEMICAL AND BACTERIOLOGICAL ANALYSIS

CERTIFICATE OF ANALYSIS

DATE: 06/12/90

90-006376-01

FORD CHEMICAL LABORATORIES

BALANCE SHEET FOR SAMPLE: (1) RESULTS

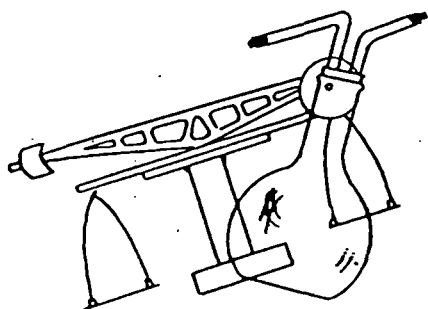
CATIONS	mg/l	meq/l
Calcium, Ca mg/l SM303A	101.020	5.041
Magnesium, Mg mg/l SM303A	16.520	1.359
Sodium, Na mg/l SM303A	62.130	2.703
Potassium, K mg/l SM303A	8.140	.208
Ammonia, NH ₃ -N mg/l SM417G	1.890	.135
ANIONS	mg/l	meq/l
Carbonate as CO ₃ mg/l SM403	.000	.000
Bicarbonate, HCO ₃ mg/l SM403	215.000	3.526
Sulfate, SO ₄ mg/l EPA 375.2	253.000	5.267
Chloride, Cl mg/l SM407A	24.000	.677
Nitrate, NO ₃ -N mg/l SM418C	.170	.003
Hydroxide as OH mg/l SM 403	.000	.000

BALANCE INFORMATION

CATIONS: 9.446
ANIONS: 9.473
TOTAL: 18.919
DIFFERENCE: .027
•SIGMA: .001

All reports are submitted as the confidential property of clients. Authorization for publication of our reports, conclusions, or, extracts from or regarding them, is reserved pending our written approval as a mutual protection to clients, the public and ourselves.

xc: File AL#0.2.2



Ford Chemical

LABORATORY, INC.

Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115

PHONE 466-8761

L1
= XG Norm

JPC
Orig to Ray Boen
G.R.

DATE: 01/28/90

CERTIFICATE OF ANALYSIS

J.R. SIMPLOT COMPANY
2 NORM GOLF
P.O. BOX 912
FOCATELLO, ID 83204

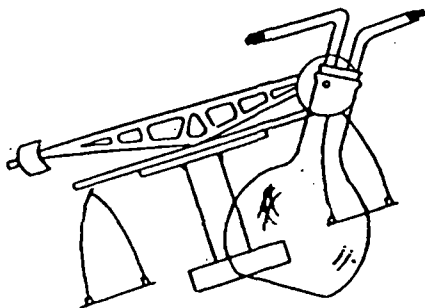
90-002757

SAMPLE: COMPOSITE WATER SAMPLE FROM SEPT. - NOV. 1989 FROM SMOXY
CONDA SLURRY PIPELINE RECEIVED 12-20-89 FOR ANALYSIS
STARTING AT 11:30 A.M.

RESULTS

=====

Alkalinity, CaCO ₃ mg/l SM403	176
Aluminum as Al mg/l SM 505L	.28
Ammonia, NH ₃ -N mg/l SM413G	.05
Arsenic, As mg/l SM304	<.002
Barium, Ba mg/l SM505L	.03
Beryllium as Be mg/l SM303A	.040
Bicarbonate, HCO ₃ mg/l SM403	239
Boron as B mg/l SM 404A	.10
Cadmium, Cd mg/l SM304	<.001
Calcium, Ca mg/l SM303A	100.00
Carbonate as CO ₃ mg/l SM403	<.10
Chloride, Cl mg/l SM407A	20.9
Chromium, Cr mg/l EPA218.1	<.001



Ford Chemical

LABORATORY, INC.

Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115

PHONE 466-8761

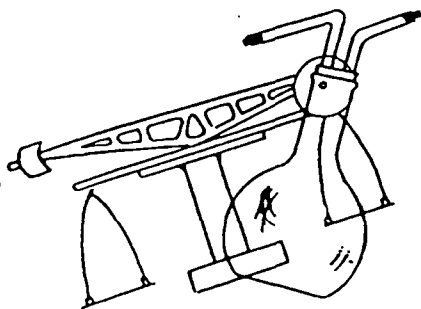
PAGE: 2

CERTIFICATE OF ANALYSIS

90-003707

RESULTS

Cobalt as Co mg/l SM 303A	4.03
Cond. umhos/cm EPA 120.1	1.050
Copper, Cu mg/l SM303A	4.01
Cyanide Cn tot. mg/l EPA 335.2	4.002
Fluoride, F mg/l SM413B	6.29
Hydroxide as OH mg/l SM 403	4.10
Iron, Fe mg/l SM303A	.02
Lead, Pb mg/l SM304	4.002
Lithium as Li mg/l	.05
Magnesium, Mg mg/l SM303A	18.76
Manganese, Mn mg/l SM303A	.15
Mercury, Hg mg/l SM320A	4.0002
Molybdenum as Mo mg/l SM303C	1.80
Nickel, Ni mg/l SM303A	.09
Nitrate, NO ₃ -N mg/l SM416C	.20
Phos. Total PO ₄ -P mg/l SM424G	0.10
Potassium, K mg/l SM303A	6.73



Ford Chemical

LABORATORY, INC.
Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115
PHONE 466-8761

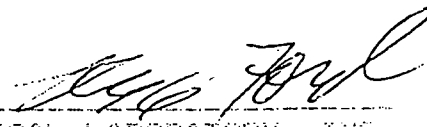
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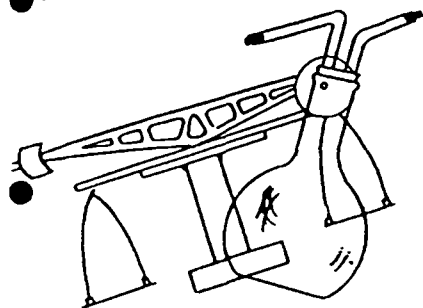
CERTIFICATE OF ANALYSIS

90-003757

RESULTS

Residual Sodium Carbonate	-5.108
Selenium, Se mg/l SM304	.010
Silica SiO ₂ (DIS) mg/l SM423A	18.10
Silver, Ag mg/l SM304	<0.005
Sodium Absorption Ratio	1.297
Sodium, Na mg/l SM303A	38.78
Sulfate, SO ₄ mg/l EPA 375.2	346
Surfactants ppm SMS12B	<0.03
Tot. Dis. Solids mg/l EPA 160.1	712
Total Kjeldahl Nit. ppm EPA 35	.10
Vanadium as V mg/l SM 303C	.36
Zinc, Zn mg/l SM303A	.36
PH Units EPA 420.1	7.00


FORD CHEMICAL LABORATORY, INC.



Ford Chemical

LABORATORY, INC.

Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115

PHONE 466-8761

DATE: 01/25/90

CERTIFICATE OF ANALYSIS

90-003757-01

FORD CHEMICAL LABORATORIES

BALANCE SHEET FOR SAMPLE: (1) RESULTS

CATIONS

	meq/l	meq/l
Calcium, Ca meq/l SM300A	100.000	7.485
Magnesium, Mg meq/l SM300A	13.760	1.043
Sodium, Na meq/l SM300A	30.900	2.566
Potassium, K meq/l SM300A	6.730	.172
Ammonia, NH ₃ -N meq/l SM417G	.000	.004

ANIONS

	meq/l	meq/l
Carbonate as CO ₃ meq/l SM400	.000	.000
Bicarbonate, HCO ₃ meq/l SM400	229.000	3.920
Sulfate, SO ₄ meq/l EPA 870.2	340.000	7.079
Chloride, Cl meq/l SM407A	20.900	.590
Nitrate, NO ₃ -N meq/l SM418C	.200	.003
Hydroxide as OH meq/l SM 403	.000	.000

BALANCE INFORMATION

CATIONS:	11.270
ANIONS:	11.992
TOTAL:	23.262
DIFFERENCE:	-.176
SIGMA:	.007

FORD ANALYTICAL LABORATORIES

CHEMICAL AND BACTERIOLOGICAL ANALYSIS

CERTIFICATE OF ANALYSIS

DATE: 01/18/91

J.R. SIMPLOT COMPANY
% NORM SELF
P.O. BOX 912
POCATELLO, ID 83204

91-003656

SAMPLE: DRIER DISCHARGE COMPOSITE SAMPLE FROM SMOKEY CANYON RECEIVED
1-14-91 FOR LEACHABLE METALS USING TCLP PROCEDURE ON RUSH
BASIS UNDER PO #10572-M.

RESULTS

- TCLP METALS

1-Arsenic as As mg/l EPA 7060	<.050	OK <u>5.0</u>
1-Barium as Ba mg/l EPA 6010	.266	OK <u>100.0</u>
1-Cadmium as Cd mg/l EPA 7130	.506	OK <u>1.0</u>
1-Chromium as Cr mg/l EPA7190	<.010	OK <u>5.0</u>
1-Lead as Pb mg/l EPA 7420	<.050	OK <u>5.0</u>
1-Mercury as Hg mg/l EPA7470	<.001	OK <u>0.2</u>
1-Selenium as Se mg/l EPA7740	<.080	OK <u>1.0</u>
1-Silver as Ag mg/l EPA 7760	<.007	OK <u>5.0</u>


FORD ANALYTICAL LABORATORIES

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is reserved pending our written approval as a mutual protection to clients, the public and ourselves.

SPILL/RELEASE REPORT FORM

RELEASED ON 09/30/87

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/30/87

MATERIAL RELEASED: 53% H2SO4

QUANTITY RELEASED: 50 GALS (500 LBS)

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 400 SULFURIC ACID PLANT

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/02/87
MATERIAL RELEASED: SULFUR DIOXIDE
QUANTITY RELEASED: UNKNOWN, > 1 LB
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: SULFUR STOCKPILE

SPILL/RELEASE REPORT FORM

RELEASED ON 10/17/87

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30 W

RELEASE DATE: 10/17/87

MATERIAL RELEASED: SULFUR DIOXIDE

QUANTITY RELEASED: 200-300 POUNDS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: SULFUR FIRE AT RR TRACKS NEAR SULFUR UNLOADING AREA BY #4 H2504

SPILL/RELEASE REPORT FORM

RELEASED ON 10/24/87

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/24/87
MATERIAL RELEASED: 93% SULFURIC
QUANTITY RELEASED: 200 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 53% ACID TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 11/23/87

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 11/23/87

MATERIAL RELEASED: 73% H2SO4

QUANTITY RELEASED: APPROX 200 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: PRODUCT TANK OVERFLOW AT #3 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 11/24/87

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/24/87
MATERIAL RELEASED: 90% H2SO4
QUANTITY RELEASED: APPROX 65 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 400 H2SO4

J. R. SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: IDN, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/04/87
MATERIAL RELEASED: NIT DIOXIDE & NIT OX
QUANTITY RELEASED: 110 POUNDS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: AMMO I STORAGE TANK (FEED TANK)

J. R. SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 512
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/22/87
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 120 GAL (1700 LBS)
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #3 H2SO4 PRODUCT LINE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/31/87

MATERIAL RELEASED: H2SO4 (36.41%)

QUANTITY RELEASED: 150 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 73% DILUTION TANK @ #300 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 03/20/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/20/88
MATERIAL RELEASED: SULFURIC ACID
QUANTITY RELEASED: 40 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 75% TANK

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/21/98
MATERIAL RELEASED: NITRIC ACID
QUANTITY RELEASED: 150 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: STORAGE TANK NO. 2

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83264

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/24/88

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: 25 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: HOLE WORK IN SIDE OF DUCT PIPING; 98% DILUTION SOOT LEAKED AT FLANGED OUTLET PIPING ON

SPILL/RELEASE REPORT FORM

RELEASED ON 03/23/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/29/88
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: MAIN ACID COOLER

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/13/88

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LEAK AT FLANGE ON PUMP DISCHARGE

SPILL/RELEASE REPORT FORM

RELEASED ON 04/19/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/19/88
MATERIAL RELEASED: 0-52-0
QUANTITY RELEASED: 40-50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: OVERFLOW RAILCAR

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/19/88

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: REMOVING OLD COILS 200 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 04/13/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/13/88
MATERIAL RELEASED: SULFUR
QUANTITY RELEASED: 300 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: SULFUR TRANSFER LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 04/13/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/13/88

MATERIAL RELEASED: 52% PHOS ACID

QUANTITY RELEASED: 500 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 4" LIQUID FEED LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 04/20/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:

J. R. SIMPLOT COMPANY

ADDRESS:

P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY

POWER

RELEASE LOCATION:

DDN, IDAHO

RELEASE ADDRESS:

1150 WEST HIGHWAY 30

RELEASE DATE:

04/20/88

MATERIAL RELEASED:

98% H2SO4

QUANTITY RELEASED:

270 GALLONS

DID MATERIAL ENTER A WATERWAY:

NO

SOURCE OF RELEASE

LEAK ON 98% TANK OUTLET PIPING ON BOTTOM SIDE OF TANK.

SPILL/RELEASE REPORT FORM

RELEASED ON 04/20/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:

J. R. SIMPLOT COMPANY

ADDRESS:

P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY

POWER

RELEASE LOCATION:

DON, IDAHO

RELEASE ADDRESS:

1150 WEST HIGHWAY 30

RELEASE DATE:

04/20/88

MATERIAL RELEASED:

10-34-0

QUANTITY RELEASED:

50 + GALLONS

DID MATERIAL ENTER A WATERWAY:

NO

SOURCE OF RELEASE

10-34-0 TRUCK

SPILL/RELEASE REPORT FORM

RELEASED ON 04/27/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/27/88
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 3 TO 4 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: H2SO4 PUMP

SPILL/RELEASE REPORT FORM

RELEASED ON 04/27/98

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/27/88

MATERIAL RELEASED: 52% PHOSPHORIC ACID

QUANTITY RELEASED: 450 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: TRANSFER LINE PHOS ACID PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 05/06/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:	J. R. SIMPLOT COMPANY
ADDRESS:	P. O. BOX 912 POCA TELLO, IDAHO 83204
COUNTY	POWER
RELEASE LOCATION:	DON, IDAHO
RELEASE ADDRESS:	1150 WEST HIGHWAY 30
RELEASE DATE:	05/06/88
MATERIAL RELEASED:	0-52-0
QUANTITY RELEASED:	800 GALLONS
DID MATERIAL ENTER A WATERWAY:	NO
SOURCE OF RELEASE	METER DID NOT CLOSE VALVE

SPILL/RELEASE REPORT FORM

RELEASED ON 05/12/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/12/88

MATERIAL RELEASED: 0-52-0 FEED

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: BROKEN FEED LINE 0-52-0 FEED TO LIQUID PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 05/12/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:

J. R. SIMPLOT COMPANY

ADDRESS:

P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY

POWER

RELEASE LOCATION:

DON, IDAHO

RELEASE ADDRESS:

1150 WEST HIGHWAY 30

RELEASE DATE:

05/12/88

MATERIAL RELEASED:

93% H2SO4

QUANTITY RELEASED:

120 GALLONS

DID MATERIAL ENTER A WATERWAY:

NO

SOURCE OF RELEASE

BROKEN LINE #3 H2SO4

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/12/88

MATERIAL RELEASED: ACID WASH WATER

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: EAST FEED ACID LINE SPLIT

SPILL/RELEASE REPORT FORM

RELEASED ON 05/13/98

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/13/98
MATERIAL RELEASED: 98% H2SO4
QUANTITY RELEASED: 20 TO 30 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 98% TANK DOWN LEG

SPILL/RELEASE REPORT FORM

RELEASED ON 05/13/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:	J. R. SIMPLOT COMPANY
ADDRESS:	P. O. BOX 912 POCA TELLO, IDAHO 83204
COUNTY	POWER
RELEASE LOCATION:	CON, IDAHO
RELEASE ADDRESS:	1150 WEST HIGHWAY 30
RELEASE DATE:	05/13/88
MATERIAL RELEASED:	52% P205
QUANTITY RELEASED:	60-80 GALLONS
DID MATERIAL ENTER A WATERWAY:	NO
SOURCE OF RELEASE	52% P205 LEAKING LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/16/88

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: ACID PIPING LEAK

SPILL/RELEASE REPORT FORM

RELEASED ON 05/17/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/17/88
MATERIAL RELEASED: 93% ACID
QUANTITY RELEASED: 35 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ACID PIPING LEAK

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/15/88
MATERIAL RELEASED: 42% F205
QUANTITY RELEASED: 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: FLANGE IN LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 05/19/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: CON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/17/88
MATERIAL RELEASED: NITRIC ACID
QUANTITY RELEASED: 2-3 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ACID LINE LEAK

SPILL/RELEASE REPORT FORM

RELEASED ON 05/20/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/20/88

MATERIAL RELEASED: 0-52-0

QUANTITY RELEASED: 30 TO 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: VALVE LEAKING

SPILL/RELEASE REPORT FORM

RELEASED ON 05/27/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/27/88
MATERIAL RELEASED: 73% H2SO4
QUANTITY RELEASED: 30 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93% TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 05/27/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DEN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/27/88

MATERIAL RELEASED: 52% ACID MUD

QUANTITY RELEASED: 75-100 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: BOTTOM VALVE RAIL CAR AT CAR WASH

SPILL/RELEASE REPORT FORM

RELEASED ON 05/29/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: CON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/29/88

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 100 GAL (1500 LBS)

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 93% H2SO4 DILUTION TANK AT 300 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 05/31/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:	J. R. SIMPLOT COMPANY
ADDRESS:	P. O. BOX 912 POCA TELLO, IDAHO 83204
COUNTY	POWER
RELEASE LOCATION:	DOM, IDAHO
RELEASE ADDRESS:	1150 WEST HIGHWAY 30
RELEASE DATE:	05/31/88
MATERIAL RELEASED:	93% H2SO4
QUANTITY RELEASED:	30 GALLONS
DID MATERIAL ENTER A WATERWAY:	NO
SOURCE OF RELEASE	COOLING TOWER OR RAY TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 05/31/88

J R SIMPLOT - POCAHELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCAHELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/31/88
MATERIAL RELEASED: HPA
QUANTITY RELEASED: 1500 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: HPA TANK RAN OVER

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/02/88
MATERIAL RELEASED: 52% P205
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: LIQUID PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 06/04/68

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:	J. R. SIMPLOT COMPANY
ADDRESS:	P. O. BOX 512 POCATELLO, IDAHO 83204
COUNTY	POWER
RELEASE LOCATION:	POW, IDAHO
RELEASE ADDRESS:	1150 WEST HIGHWAY 20
RELEASE DATE:	06/04/68
MATERIAL RELEASED:	DIESEL FUEL
QUANTITY RELEASED:	30 GALLONS
DID MATERIAL ENTER A WATERWAY:	NO
SOURCE OF RELEASE	#33 SWITCH ENGINE FUEL TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 06/08/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/08/88

MATERIAL RELEASED: 92% H2SO4

QUANTITY RELEASED: 10 BALLENS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: FBX PIPING TO DRYING TOWER

SPILL/RELEASE REPORT FORM

RELEASED ON 06/11/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/11/88

MATERIAL RELEASED: #342504

QUANTITY RELEASED: LESS THAN 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: ECONOMIZER

SPILL/RELEASE REPORT FORM

RELEASED ON 06/22/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: C. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/22/88
MATERIAL RELEASED: 92% H2SO4
QUANTITY RELEASED: 4 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: DRYING TOWER OUTLET LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/24/88

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 45 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #4 H2SO4 75 TANK DRAIN LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 06/24/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/24/88

MATERIAL RELEASED: 95% H2SO4

QUANTITY RELEASED: 5 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #4 H2SO4 H2O DILUTION LINE ON SIDE OF 95% TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 06/26/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/26/88
MATERIAL RELEASED: 98% H2SO4
QUANTITY RELEASED: 150 GAL (2000 LBS)
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #4 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 06/30/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/30/88

MATERIAL RELEASED: 0-70-0 DEFLO

QUANTITY RELEASED: 150 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: HOLE IN CAR GATX 52157

SPILL/RELEASE REPORT FORM

RELEASED ON 07/08/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/08/88
MATERIAL RELEASED: 502
QUANTITY RELEASED: 100 TO 500 POUNDS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: FIRE AT A SULFUR PILE

SPILL/RELEASE REPORT FORM

RELEASED ON 07/16/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: COV. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/16/88
MATERIAL RELEASED: 0-52-0
QUANTITY RELEASED: 2 TO 5 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: BROKEN LINE FROM 55 TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 02/03/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/07/88
MATERIAL RELEASED: 0-50-0
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: BROKEN LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DEN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 08/04/88

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 40 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: DRAINING ACID TRUCK LOADING LINE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DEN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 08/15/88

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 100 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: PIPING FROM ACID TOWERS TO PUMP TANK

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 512
POCATELLO, IDAHO 83224
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1130 WEST HIGHWAY 30
RELEASE DATE: 08/18/88
MATERIAL RELEASED: 53% H2SO4
QUANTITY RELEASED: 15 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ACID RAILCAR

SPILL/RELEASE REPORT FORM

RELEASED ON 08/19/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 08/19/88
MATERIAL RELEASED: DE-FLO 6-70-0
QUANTITY RELEASED: 50 TO 60 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 6-70-0 TRANSFER LINE TO DILUTION TANK

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POCAE
RELEASE LOCATION: DON. 104RD
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/15/88
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 100 GAL (1300 LBS)
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93% TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 09/06/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/06/88
MATERIAL RELEASED: 0-70-0
QUANTITY RELEASED: 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: GATX 17225 ACID CAR

SPILL/RELEASE REPORT FORM

RELEASED ON 09/07/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: CON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/07/88

MATERIAL RELEASED: CHROMATE

QUANTITY RELEASED: 3 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: CHROMATE STORAGE TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 09/13/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 HIGHWAY 30 W

RELEASE DATE: 09/13/88

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 2 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: THERMOCOUPLE LEAKED

SPILL/RELEASE REPORT FORM

RELEASED ON 09/15/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/15/88

MATERIAL RELEASED: P205

QUANTITY RELEASED: 30 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: OLD UNUSED FIBERCAST LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 09/28/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 09/28/88
MATERIAL RELEASED: HPA
QUANTITY RELEASED: 300 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: TANK RAN OVER

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/06/88
MATERIAL RELEASED: H2504
QUANTITY RELEASED: 60 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: H2504 PUMP SEAL

SPILL/RELEASE REPORT FORM

RELEASED ON 10/06/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/06/88
MATERIAL RELEASED: 98% H2SO4
QUANTITY RELEASED: 10 BALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ABSORBING TOWER

SPILL/RELEASE REPORT FORM

RELEASED ON 10/20/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/20/88
MATERIAL RELEASED: NITRIC ACID
QUANTITY RELEASED: 5 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #2 TANK OVERFLOW

SPILL/RELEASE REPORT FORM

RELEASED ON 10/22/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DCN, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/22/88
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 6.5 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #3 H2SO4 PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 10/25/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/25/88
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 40 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93% TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 10/28/98

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/28/98
MATERIAL RELEASED: SULFURIC ACID
QUANTITY RELEASED: 150 GALLONS APPROX
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: TANK

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 10/31/88

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 755 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: OLD 100 H2SO4 SULFURIC FEED LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 11/06/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/06/88
MATERIAL RELEASED: NITRIC ACID
QUANTITY RELEASED: 450 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: NEWEST NITRIC ACID STORAGE TANK

J R SIMPLOT - POCA TELLO
MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/16/88
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 3 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 50% CONTROL TANK AT 200 D.T. NH3

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:

J. R. SIMPLOT COMPANY

ADDRESS:

P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY

POWER

RELEASE LOCATION:

POCATELLO, IDAHO

RELEASE ADDRESS:

UNION PACIFIC RAILYARD, BOWL #7, POCATELLO, IDAHO

RELEASE DATE:

11/21/88

MATERIAL RELEASED:

PHOSPHORIC ACID

QUANTITY RELEASED:

3000-4000 POUNDS

DID MATERIAL ENTER A WATERWAY:

NO

SOURCE OF RELEASE

LEAKING RAILCAR UTLX 13795

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 11/25/88

MATERIAL RELEASED: 75% H2SO4

QUANTITY RELEASED: 150 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #200 NH3 COOLING TOWER pH TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 11/29/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/29/88
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 75 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 98% ACID COOLER

SPILL/RELEASE REPORT FORM

RELEASED ON 12/01/88

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/01/88
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: LESS THAN A QUART
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: M-3 PLANT H2SO4 LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 512
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/01/68
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93% H2SO4 LINE TO NH3 PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 12/03/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/03/88
MATERIAL RELEASED: 93%
QUANTITY RELEASED: 1 PINT
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: FILL LINE TO 200 NHS C.T. pH TANK

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/12/88

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 200 NH3 200 C.T. GH CONTROL ACID TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 12/20/88

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/20/88

MATERIAL RELEASED: NITRIC ACID 52%

QUANTITY RELEASED: 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #2 NITRIC ACID STORAGE TANK

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/29/98

MATERIAL RELEASED: SUPERPHOSPHORIC ACID

QUANTITY RELEASED: 15 GALLONS (245 LB)

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #3 LOADING STATION

SPILL/RELEASE REPORT FORM

RELEASED ON 01/04/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 01/04/89
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: VALVE OPEN ON TRUCK

SPILL/RELEASE REPORT FORM

RELEASED ON 01/07/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 01/07/89

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 35 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 200 NH3 COOLING TOWER OH TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 01/11/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 01/11/89

MATERIAL RELEASED: WATER & P205

QUANTITY RELEASED: 400-800 POUNDS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #55 TANK PAD

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 01/12/87

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: 475 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: STORAGE TANK NO. 4

SPILL/RELEASE REPORT FORM

RELEASED ON 01/17/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 01/17/89

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 93% ACID FEED LINE TO SULFATE UNIT

SPILL/RELEASE REPORT FORM

RELEASED ON 01/18/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 01/13/89

MATERIAL RELEASED: PHOS ACID SPG, 1.342

QUANTITY RELEASED: 200 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: TRANSFER LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 01/13/89
MATERIAL RELEASED: H2SO4 AND WATER
QUANTITY RELEASED: 1180 POUNDS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: H2SO4 FEED STATION

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 02/03/69
MATERIAL RELEASED: H2SO4 93%
QUANTITY RELEASED: 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93% SAMPLE LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 02/07/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 02/07/89
MATERIAL RELEASED: 52% P205
QUANTITY RELEASED: 500 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 52% TO LIQUID PLANT FEED LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 02/10/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
 ADDRESS: P. O. BOX 912
 POCA TELLO, IDAHO 63204
 COUNTY: POWER
 RELEASE LOCATION: DON, IDAHO
 RELEASE ADDRESS: 1150 WEST HIGHWAY 30
 RELEASE DATE: 02/10/89
 MATERIAL RELEASED: 9-52-0
 QUANTITY RELEASED: 25 GALLONS
 DID MATERIAL ENTER A WATERWAY: NO
 SOURCE OF RELEASE: DILUTION TANK AT LIQUID PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 02/10/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 02/10/89

MATERIAL RELEASED: 0-68-0

QUANTITY RELEASED: 30 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: TRUCK LOADING LINE AT LIQUID PLANT

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 02/18/89
MATERIAL RELEASED: 52% P205
QUANTITY RELEASED: 500 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: DILUTION TANK OVERFLOWED

SPILL/RELEASE REPORT FORM

RELEASED ON 03/03/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DCN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/03/89

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 30 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: COOLING TOWER OR CONTROL TANK FILL LINE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 512
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/14/89

MATERIAL RELEASED: 52% PHOS ACID

QUANTITY RELEASED: 150 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LIQUID FEED LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 03/15/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/15/89

MATERIAL RELEASED: SULFURIC ACID

QUANTITY RELEASED: 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 3" SULFURIC TRANSFER LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/18/89

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: FINAL PUMP DISCHARGE LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY ✓
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/17/89
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 30 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93% PUMP TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 03/19/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/19/89

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 93 PLANT PRODUCT LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 03/19/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/19/89
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 200 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 93 PUMP TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 03/20/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/20/89

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: FINAL PUMP DISCHARGE LINE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/20/89
MATERIAL RELEASED: SULFURIC ACID
QUANTITY RELEASED: 40 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: LEAK ON 3" L. LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 03/29/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCAATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/29/89

MATERIAL RELEASED: HPA

QUANTITY RELEASED: 100 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: FAIL CAR FAN OVER

SPILL/RELEASE REPORT FORM

RELEASED ON 04/03/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/03/89

MATERIAL RELEASED: 0-69-0

QUANTITY RELEASED: 4 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: TRANSFER LINE AT LIQUID PLANT

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/21/89
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 60 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 04/24/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/24/89

MATERIAL RELEASED: 37% H2SO4

QUANTITY RELEASED: 40 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: OLD PIPING

SPILL/RELEASE REPORT FORM

RELEASED ON 04/24/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/24/89

MATERIAL RELEASED: 6-52-0 PHOS ACID

QUANTITY RELEASED: 75 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LOADING RAIL CAR

SPILL/RELEASE REPORT FORM

RELEASED ON 06/16/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/16/89
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: APPROX 5 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: H2SO4 4 FIRING

SPILL/RELEASE REPORT FORM

RELEASED ON 06/27/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/27/89
MATERIAL RELEASED: 98% H2SO4
QUANTITY RELEASED: 20 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: LINE BROKE APART (INACTIVE LINE)

SPILL/RELEASE REPORT FORM

RELEASED ON 06/25/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/25/89
MATERIAL RELEASED: AMMSOX
QUANTITY RELEASED: 100 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: OVERFLOWED THE PAD

SPILL/RELEASE REPORT FORM

RELEASED ON 06/29/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DEN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/28/89

MATERIAL RELEASED: P20E

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: PRODUCT 4" LINE TO AP I PLANT TANKS

SPILL/RELEASE REPORT FORM

RELEASED ON 07/01/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 07/01/89

MATERIAL RELEASED: 98% H2SO4 #300 H2SO4

QUANTITY RELEASED: 100 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 93% PUMP TANK (CONTAINED 98% H2SO4)

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 07/06/89

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 3-5 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: H2SO4 LINE TO NH3 COOLING TOWER PH TANK AND DEMINERALIZER SYSTEM

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/19/89
MATERIAL RELEASED: P205 - 65%
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 0-70-0 TRANSFER LINE

J R SIMPLOT - FOCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
FOCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/31/89
MATERIAL RELEASED: 68% P205
QUANTITY RELEASED: 25 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: FILTER COOLER PUMP

SPILL/RELEASE REPORT FORM

RELEASED ON 08/05/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 02/05/89

MATERIAL RELEASED: 54% P205

QUANTITY RELEASED: 10 TO 25 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: DILUTION COOLER AT LIQUID PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 08/09/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/09/89
MATERIAL RELEASED: SULFURIC ACID
QUANTITY RELEASED: 5 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 3" TRANSFER LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 08/12/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 08/12/89
MATERIAL RELEASED: PHOS ACID
QUANTITY RELEASED: APPROX 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: CAR WASH

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 08/29/87

MATERIAL RELEASED: 68% F205

QUANTITY RELEASED: 10 + GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LIQUID PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 09/01/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/01/89

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 1 PINT

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: HOLE IN LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 09/06/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: IDH, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/06/89

MATERIAL RELEASED: PHOS ACID - 0-52-0

QUANTITY RELEASED: APPROX 60 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 0-52-0 LOADING LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 07/08/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DEN, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 09/08/89
MATERIAL RELEASED: BETZ 7114 POLYMER
QUANTITY RELEASED: 15 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: TOTE TANK OVERFILLED

SPILL/RELEASE REPORT FORM

RELEASED ON 09/21/89

J R SIMPLOT - POCAHELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCAHELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 09/21/89
MATERIAL RELEASED: 16.4% F205
QUANTITY RELEASED: 2000-3000 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #4 LCL STORAGE TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 09/22/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/22/89

MATERIAL RELEASED: H2SO4 93%

QUANTITY RELEASED: LESS THAN 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: PIPING

SPILL/RELEASE REPORT FORM

RELEASED ON 10/05/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/05/89
MATERIAL RELEASED: RL FROM CRYSTALLIZER
QUANTITY RELEASED: 5000 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 10" DRAIN LINE AT SULFATE

SPILL/RELEASE REPORT FORM

RELEASED ON 10/11/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/11/89
MATERIAL RELEASED: 52% P2O5
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 32 CAR

SPILL/RELEASE REPORT FORM

RELEASED ON 10/27/87

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 10/27/87
MATERIAL RELEASED: NITRIC ACID - 55%
QUANTITY RELEASED: 20 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #2 STORAGE TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 11/11/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/11/89
MATERIAL RELEASED: CHROMATE
QUANTITY RELEASED: APPROX 3 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: SUCTION LINE TO PUMP

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/06/89

MATERIAL RELEASED: 0-70-0 PHOS

QUANTITY RELEASED: 25 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: BROKEN VALVE ON #5

SPILL/RELEASE REPORT FORM

RELEASED ON 12/11/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/11/89

MATERIAL RELEASED: 90% H2SO4

QUANTITY RELEASED: LESS THAN 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: ACID SUPPLY LINE TO NH3 PLANT

SPILL/RELEASE REPORT FORM

RELEASED ON 12/11/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/11/89
MATERIAL RELEASED: 54% NITRIC ACID
QUANTITY RELEASED: 3 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #2 ACID STORAGE TANK

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/12/89
MATERIAL RELEASED: 0-70-0
QUANTITY RELEASED: 75-100 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #3 0-70-0 TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 12/20/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 512
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/20/89

MATERIAL RELEASED: SCRUBBER LIQUOR (73%)

QUANTITY RELEASED: 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 1/2" SAMPLE LINE TO 5H METER

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME:	J. R. SIMPLOT COMPANY
ADDRESS:	P. O. BOX 912 POCA TELLO, IDAHO 83204
COUNTY	POWER
RELEASE LOCATION:	DOX, IDAHO
RELEASE ADDRESS:	1150 WEST HIGHWAY 30
RELEASE DATE:	12/24/89
MATERIAL RELEASED:	98% H2SO4
QUANTITY RELEASED:	1-2 GALLONS
DID MATERIAL ENTER A WATERWAY:	NO
SOURCE OF RELEASE	LEAK IN DRYING TOWER TEMPERATURE CONTROL AUTO VALVE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: CON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/25/89

MATERIAL RELEASED: 54% NITRIC ACID

QUANTITY RELEASED: 3-5 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: HATLACK TRUCK #39, TRAILER 3081, BILL OF LADING 6537

SPILL/RELEASE REPORT FORM

RELEASED ON 12/28/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DCN, IDHAG

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/28/89

MATERIAL RELEASED: 52% NH₄Cl

QUANTITY RELEASED: 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #2 ACID STORAGE TANK

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
 ADDRESS: P. O. BOX 912
 POCATELLO, IDAHO 83204
 COUNTY: POWER
 RELEASE LOCATION: DON, IDAHO
 RELEASE ADDRESS: 1150 WEST HIGHWAY 30
 RELEASE DATE: 12/29/89
 MATERIAL RELEASED: 78% H2SO4
 QUANTITY RELEASED: 5 GALLONS
 DID MATERIAL ENTER A WATERWAY: NO
 SOURCE OF RELEASE: OVERFLOW PUMPOUT TANK

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: FOWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 12/29/89
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 20 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 90% TANK RAN OVER AT #4 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 01/06/79

J R SIMPLOT - POCAHELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCAHELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 01/06/79
MATERIAL RELEASED: UN-32
QUANTITY RELEASED: 28,000-30,000 GALS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #1 UN-STORAGE TANK; ALL SPILL RECLAIMED

SPILL/RELEASE REPORT FORM

RELEASED ON 01/09/90

J R SIMPLOT - FOCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
FOCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 01/09/90
MATERIAL RELEASED: ANMSOX SCRUBBER LIQ
QUANTITY RELEASED: APPROX 100 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: PAD OVERFLOWED

SPILL/RELEASE REPORT FORM

RELEASED ON 01/27/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 01/27/90

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: PIPING SPOOL PIECE FAILED

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
 ADDRESS: P. O. BOX 912
 POCA TELLO, IDAHO 83204
 COUNTY: POWER
 RELEASE LOCATION: DON, IDAHO
 RELEASE ADDRESS: 1150 WEST HIGHWAY 30
 RELEASE DATE: 02/08/90
 MATERIAL RELEASED: 52% PHOSPHORIC ACID
 QUANTITY RELEASED: 129 POUNDS
 DID MATERIAL ENTER A WATERWAY: NO
 SOURCE OF RELEASE: TANK 55

SPILL/RELEASE REPORT FORM

RELEASED ON 02/08/93

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 02/06/90
MATERIAL RELEASED: LBL
QUANTITY RELEASED: 500 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: LIQUID, PLANT #4 DUCK

SPILL/RELEASE REPORT FORM

RELEASED ON 02/20/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 02/20/90

MATERIAL RELEASED: 52% PHOS ACID

QUANTITY RELEASED: 20 TO 100 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LEAKING PACKING ON #33 TRANSFER PUMP

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 512
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/02/90
MATERIAL RELEASED: 2.5% P205
QUANTITY RELEASED: 150 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: EVAPS

SPILL/RELEASE REPORT FORM

RELEASED ON 03/07/90

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 03/07/90
MATERIAL RELEASED: 75% H2SO4
QUANTITY RELEASED: 50-50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ACID LINE TO B.F.W. PREHEATER

SPILL/RELEASE REPORT FORM

RELEASED ON 03/29/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 03/29/90

MATERIAL RELEASED: 54% NITRIC ACID

QUANTITY RELEASED: 70 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #2 NITRIC ACID STORAGE TANK

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/03/90
MATERIAL RELEASED: NITRIC ACID
QUANTITY RELEASED: APPROX 100 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ACID SUMP

SPILL/RELEASE REPORT FORM

RELEASED ON 04/18/90

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/18/90
MATERIAL RELEASED: 6-52-0
QUANTITY RELEASED: 30 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 53 TRANSFER LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/19/90
MATERIAL RELEASED: 52% PHOS ACID
QUANTITY RELEASED: 30 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 53 TRANSFER LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 04/20/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 04/20/90
MATERIAL RELEASED: 52% F205
QUANTITY RELEASED: 15 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 53 TANK TRANSFER LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/06/90

MATERIAL RELEASED: 6-52-9 ACID

QUANTITY RELEASED: APPROX 20 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: BROKEN LIQUID PLANT FEED LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/08/90

MATERIAL RELEASED: 0-52-0 ACID

QUANTITY RELEASED: APPROX 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: BROKEN LIQUID PLANT FEED LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 04/27/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 04/27/89

MATERIAL RELEASED: 0-66-0 DEFLO

QUANTITY RELEASED: 150-200 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LOADING LINE TO RAIL CAR

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/09/89

MATERIAL RELEASED: WEAK H2SO4 30%

QUANTITY RELEASED: 15 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: STACK DRAIN - 400 PLANT

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/15/89
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: #4 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 05/16/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/16/89
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 440 POUNDS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: AES TOWER SEAL LBS DRAIN LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/22/89

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: APPROX 5 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: MAG METER ON PROD LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/23/89

MATERIAL RELEASED: 98% ACID

QUANTITY RELEASED: 17 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: FLANGE LEAK ON FINAL TOWER RETURN LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 05/24/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: FORER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/24/89

MATERIAL RELEASED: 30% H2SO4

QUANTITY RELEASED: 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #2 H2SO4 DRYING TOWER DOWN LEG

SPILL/RELEASE REPORT FORM

RELEASED ON 05/25/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/25/89

MATERIAL RELEASED: 0-68-0

QUANTITY RELEASED: 1200-2000 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LOADING LINE TO RAIL CAR

SPILL/RELEASE REPORT FORM

RELEASED ON 06/05/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/05/89
MATERIAL RELEASED: 95% H2SO4
QUANTITY RELEASED: 2-3 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 3" H2SO4 TRANSFER LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/06/89

MATERIAL RELEASED: 95% H2SO4

QUANTITY RELEASED: 1 GALLON

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 100 COOLING TOWER pH CONTROL TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 06/11/89

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/11/89

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: 7-10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #1 H2SO4 TANK AND PUMP AREA SUMP PUMP

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: CON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/13/89
MATERIAL RELEASED: SULFURIC ACID - 98%
QUANTITY RELEASED: 150 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: BROKEN ACID LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 06/15/89

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: FOWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/15/89
MATERIAL RELEASED: 95% H2SO4
QUANTITY RELEASED: 3 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: SUMP BASIN AT PUMPS

SPILL/RELEASE REPORT FORM

RELEASED ON 05/07/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: BANNOCK

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/07/90

MATERIAL RELEASED: SUPER ACID DEFLO

QUANTITY RELEASED: APPROX 250 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/14/90

MATERIAL RELEASED: 93% H2SO4

QUANTITY RELEASED: 10 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: RAILCAR LOADING LINE FILTER

SPILL/RELEASE REPORT FORM

RELEASED ON 05/16/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 512
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/16/90

MATERIAL RELEASED: UN32

QUANTITY RELEASED: 400 TO 500 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: KENTCO TRUCK #1146, LEAKING VALVE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: CON. IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 05/23/90
MATERIAL RELEASED: 2-4% PCE
QUANTITY RELEASED: 200 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: LIQUID PLANT

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 05/30/99

MATERIAL RELEASED: NITRIC ACID

QUANTITY RELEASED: APPROX 20-25 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #2 NITRIC ACID TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 06/09/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/09/90
MATERIAL RELEASED: H2SO4
QUANTITY RELEASED: 200 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: PRODUCT TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 06/11/90

J R SIMPLOT - FOCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
FOCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: CON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/11/90

MATERIAL RELEASED: H2SO4

QUANTITY RELEASED: 100 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #3 H2SO4, ACID PIPING

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/15/90

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 150 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: H2SO4 TRANSFER PIPING

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/20/90

MATERIAL RELEASED: 75% H2SO4

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: DRAIN LINE @ #3 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON 06/20/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: CON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 06/20/90

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 35 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 73 ACID COOLER

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 06/22/90
MATERIAL RELEASED: SULFURIC ACID
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 96% PUMP TANK

SPILL/RELEASE REPORT FORM

RELEASED ON 07/18/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 07/15/90

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 30 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: SOUTH 98 I.A.T. PUMP #4 H2SO4

SPILL/RELEASE REPORT FORM

RELEASED ON: 07/17/90

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 512
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DEN, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/17/90
MATERIAL RELEASED: 75% H2SO4
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: ACID TRANSFER LINE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 07/24/90
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 20-25 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: LOADING RAILCAR

SPILL/RELEASE REPORT FORM

RELEASED ON 09/17/90

J R SIMPLOT - POCAHELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCAHELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: BCN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/17/90

MATERIAL RELEASED: 0-70-0

QUANTITY RELEASED: 25+ GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: NTRIC REACTOR

SPILL/RELEASE REPORT FORM

RELEASED ON 09/20/99

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: BOX, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 09/20/99
MATERIAL RELEASED: 42% P205
QUANTITY RELEASED: 1000 GAL (7000 LBS)
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: NORTH OF #22 TANK PAD

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83304

COUNTY: POWER

RELEASE LOCATION: IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 07/13/90

MATERIAL RELEASED: LSL 0-70-0

QUANTITY RELEASED: 20 TO 30 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: #4 STORAGE TANK TRANSFER LINE

J R SIMPLOT - POCATELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCATELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: IDN, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 09/26/90

MATERIAL RELEASED: P205, 0-70-0

QUANTITY RELEASED: 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: LIQUID

SPILL/RELEASE REPORT FORM

RELEASED ON 11/03/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 11/03/90

MATERIAL RELEASED: NITRIC ACID, 52%

QUANTITY RELEASED: 30 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: NITRIC ACID STORAGE TANK #1

SPILL/RELEASE REPORT FORM

RELEASED ON: 11/05/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/05/90
MATERIAL RELEASED: 90% H2SO4
QUANTITY RELEASED: 5 TO 10 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: 3" H2SO4 TRANSFER LINE

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: CON. IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 11/06/90

MATERIAL RELEASED: 42% FOS

QUANTITY RELEASED: 3,634 LBS (HOPC4)

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: FOS ACID - #22 TANK TRANSFER SYSTEM

SPILL/RELEASE REPORT FORM

RELEASED ON 11/13/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 712
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: CON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/13/79
MATERIAL RELEASED: 90% H2SO4
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: AMMONIA ACID SUPPLY LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 11/17/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY
ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204
COUNTY: POWER
RELEASE LOCATION: DON, IDAHO
RELEASE ADDRESS: 1150 WEST HIGHWAY 30
RELEASE DATE: 11/17/90
MATERIAL RELEASED: 93% H2SO4
QUANTITY RELEASED: 50 GALLONS
DID MATERIAL ENTER A WATERWAY: NO
SOURCE OF RELEASE: EAST AMMO PHOS FEED PUMP

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 11/21/90

MATERIAL RELEASED: SULFURIC ACID H2SO4

QUANTITY RELEASED: APPROX 50 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: H2SO4 LINE

SPILL/RELEASE REPORT FORM

RELEASED ON 11/30/90

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: DON, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 11/30/90

MATERIAL RELEASED: 98% H2SO4

QUANTITY RELEASED: 15 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: 98 DILUTION FOOT INLET ELBOW

J R SIMPLOT - POCA TELLO

MINERALS & CHEMICAL DIVISION

COMPANY NAME: J. R. SIMPLOT COMPANY

ADDRESS: P. O. BOX 912
POCA TELLO, IDAHO 83204

COUNTY: POWER

RELEASE LOCATION: COA, IDAHO

RELEASE ADDRESS: 1150 WEST HIGHWAY 30

RELEASE DATE: 12/01/90

MATERIAL RELEASED: 83% H2SO4

QUANTITY RELEASED: 15 GALLONS

DID MATERIAL ENTER A WATERWAY: NO

SOURCE OF RELEASE: PRODUCT ACID TRANSFER LINE

5.2.1

J. R. SIMPLOT COMPANY
MINERALS & CHEMICAL GROUP
DON, IDAHO

PRODUCT FLOW CHARTS
&
INFORMATION SHEETS

November 7, 1989

Exhibit #16

5.2.1

0002

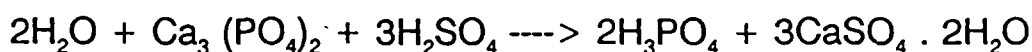
Volume 2 of 2

DON PLANT

Phosphate ore is shipped in by rail from the Smoky Canyon Mine year round, and from the Gay Mine during the summer months. The ore is stockpiled during the heavy shipping months and used during the winter or light shipping months.

The ore is conveyed from the stockpile to the calciner where it is heated to about 1,500°F., burning out the organic material contained in the ore, thus upgrading the phosphate content by 2-3%. The rock exits the calciner analyzing approximately 32-34% P_2O_5 (Phosphorous Pentoxide).

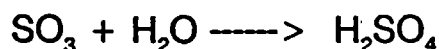
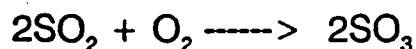
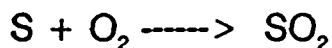
The calcined ore is then ground in Raymond Roller Mills to a fine powder. The ground ore is reacted with sulfuric acid in the phosphoric acid plant to produce phosphoric acid and gypsum, the gypsum being a by-product. This reaction is approximated by the equation:



Water + Phosphate Ore + Sulfuric Acid = Phosphoric Acid + Gypsum

The phosphoric acid produced in the phosphoric acid plant is 28-30% P_2O_5 . This acid is then used to make various grades of fertilizers, either as is or, in most applications, concentrated up to 44-52% P_2O_5 .

The sulfuric acid used to make phosphoric acid is produced in two separate plants capable of making 3,200 tons per day of sulfuric acid. The acid is produced by burning liquid sulfur with air to form SO_2 . The SO_2 is then reacted with oxygen over a catalyst to form SO_3 . The SO_3 is then absorbed in water, in the presence of 98% sulfuric, to form sulfuric acid. The reactions are as follows:



The Don Plant makes and ships five grades of solid fertilizers and four grades of liquid fertilizers. Three of the solids are designated as 'Ammono-Phos' (ammonium phosphate). They are 16-20-0 (ammonium phosphate-sulfate), 18-46-0 (di-ammonium phosphate), and 11-52-0 (mono-ammonium phosphate). Ammonium Sulfate (21-0-0) is another solid fertilizer. The fifth is Triple Superphosphate (0-45-0). The numbers, in order, represent the percent of nitrogen, phosphate, and potash - the basic plant foods - in the product.

In the manufacture of solid ammo-phos the ammonia, phosphoric acid, and sulfuric acid are mixed in a reactor, forming a slurry. This slurry is then mixed with recycle fine product in a granulator. The slurry coats the outside of the recycle particle to form a layer of fresh ammo-phos. The granulated material is then dried and screened. The oversized material is crushed and is recycled with the fines. The intermediate fraction, the product, is cooled and conveyed to storage.

Ammonium sulfate is produced by reacting ammonia and sulfuric acid in a crystallizer under a vacuum, which forms a crystalline product. The crystals are separated from the liquid phase by centrifuging, the crystals being dried and conveyed to storage, and the liquid phase returned to the crystallizer as a "seed" solution.

Triple superphosphate (0-45-0) is produced by reacting ground limestone with phosphoric acid, using a patented Simplot process. This acidulated material is granulated, dried, and screened.

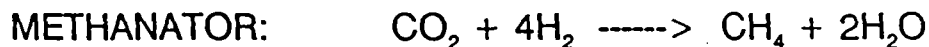
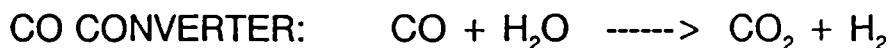
The four grades of liquid fertilizer are 0-52-0 (normal shipping acid), 0-68-0 (super acid), 10-34-0 (liquid ammo phos), and 32-0-0 (UN-32, a solution of ammonium nitrate and urea). The first two are produced by concentration, by evaporation under vacuum, the 28-30% P_2O_5 acid produced in the process first described.

The 10-34-0 is made by reacting ammonia, water, and super acid.

The 32-0-0 (UN-32) is made in a plant that is really three plants in one. Urea is produced by the reaction between carbon dioxide and ammonia in an autoclave. Nitric acid is produced by the conversion of ammonia into nitric oxides with subsequent solution in water. The nitric acid is reacted with

ammonia to produce ammonium nitrate. The urea and ammonium nitrate are then dissolved in water in the proper ratio to produce a solution containing 32% nitrogen (32-0-0).

The ammonia used in the manufacture of the previously mentioned fertilizers is also produced at the Don Plant. It is produced by mixing steam and natural gas together, passing it over a catalyst at high temperature and relatively high pressure to form hydrogen (H_2) and carbon monoxide (CO). Air is mixed in with this stream following the first stage to furnish the nitrogen requirements. The CO is then converted to carbon dioxide (CO_2) and absorbed in monoethanolamine. The unabsorbed CO_2 is then reacted with hydrogen to form methane and water. The water is removed, and the gaseous stream is then compressed to a high pressure (4,200 psig) and passed over a catalyst to form ammonia from the nitrogen and hydrogen. The basic reactions occurring in the plant are:



Simplot schematic flow sheets of most of the described processes are attached.

GAY MINE

The phosphate rock and shales in Southeastern Idaho, Western Wyoming, Northern Utah, and part of Southwestern Montana were deposited during the Permian geological period some two hundred million years ago. The entire area was covered by a sea in which the conditions were exactly right for its deposition from sea water. There is considerable conjecture

about the method of deposition, but it is thought the climate was cool and the atmosphere high in carbon dioxide which could give the right conditions for the formation of phosphate deposits. The deposits were deeply covered by later marine sediments with the area being subsequently uplifted and cut by erosion to expose the ore.

The Gay Mine is located 30 miles northeast of Pocatello on the Fort Hall Indian Reservation, where the J. R. Simplot Company has industrial and mineral leases from the Shoshone-Bannock Indian Tribes.

In 1945 the J. R. Simplot Company became actively engaged in exploration for a source of phosphate rock for their fertilizer plant located at Don, Idaho (near Pocatello). At that time, phosphate rock was being purchased and shipped to the plant from the Montpelier area to the east.

The Fort Hall deposits were examined and found to be satisfactory. Production started in 1947. At that time it was recognized that in order to utilize the maximum tonnage of high grade ores ($+31\% \text{P}_2\text{O}_5$) from relatively cheap open pit operations, it would be necessary to find a market for the phosphatic shales mined before the high grade ores could be mined, and unless they could be sold the open pit tonnage was limited.

The Westvaco Chemical Division of Food and Machinery Corporation (FMC) was contacted, and the result is the large electric furnace installation for the production of elemental phosphorous now located just west of the Simplot fertilizer plant.

In 1949 a railroad was completed to the mine and loading installations were constructed. A short time later an automatic sampler was built in order to get a continuous sample of the material being shipped and to facilitate blending to maintain grade. Our practice is to mine from two or more pits in one year and to have several faces in any one pit ready for mining. We are thus able to blend and maintain quite uniform grade by short moves of the mining equipment.

The high grade ores are now used for the production of Simplot Triple Superphosphate fertilizers and the manufacture of phosphoric acid. The grade of the phosphate shales is maintained as close to $24\% \text{P}_2\text{O}_5$ as possible for the production of elemental phosphorous. The high grade ores

are from three feet to six feet thick and are separated from the furnace shales above by a three foot bed of limestone. The furnace shales vary in thickness from fifteen feet to sometimes as much as forty feet.

The first year's operation was accomplished with small 3/4 yard shovels, tractors, and contract truckers. The ore was transported to Fort Hall, 18 miles west of the mine, and loaded on the railroad at this point. There were 58,000 tons produced that first year.

The mine now operates two shifts per day; 8-hour shifts in winter, and 9-hour shifts in summer. In order to maintain a uniform grade of ore, continuous sampling and assaying is necessary on ore being mined and on ore found in drill holes. This continues the entire year. During summer, when the ore is being shipped, additional sampling and assaying is done to record and control all shipments.

The mining areas are selected for grade and location. The selection for grade is made from drill hole results, and the selection of location is based on averaging the length of ore haul to the railroad loading point. The operation consists of two phases: stripping, which is the removal of waste material to uncover the ore, and mining, which is the taking of the ore. Because of the large workload, these operations are continuous during the entire year. They are usually done simultaneously within a given mining area but can be done alternately, depending upon the conditions. As the mining in an area nears completion, it is necessary to prepare another.

During the year, the total production is over 2,000,000 tons, which requires 24,000 to 25,000 railroad cars. In order to keep the ore moving, the Union Pacific Railroad supplies between 400-450 cars in the circuit. They run two trains of 100 to 110 cars a day, five days a week, and one train on Saturday.

Because of the moisture content in the ore, it is necessary that the total ore production is shipped to Pocatello in the summer to avoid its freezing in the railroad cars. This operations usually starts in April and continues to October.

We are continually adding larger equipment to move the tonnage required. As the near surface ores are depleted, it is necessary to strip a

greater yardage to uncover the ores. Presently we are mining to the depth of 300 feet and are removing approximately six tons of waste to recover one ton of ore. Power shovels are used in the mining and in the stripping operations. However, most of the waste is removed by 24 cubic yard self-powered scrapers. These are aided by crawler tractors in loading. The waste is discarded and substantial tonnage of low grade phosphate shales are stockpiled for future beneficiation.

The ore reserves in the western phosphate field are tremendous, but only a small part are suited for open pit mining. As the open pit ores are exhausted and the economics become favorable, underground mining may become more important.

CONDA OPERATIONS

The Conda phosphate operation of the J. R. Simplot Company is located in Caribou County in Southeastern Idaho, seven miles north of Soda Springs and seventy miles east of Pocatello.

This property was formerly owned by the Anaconda Company and operated by them since 1920. In April of 1959 the J. R. Simplot Company entered into a joint operating agreement with A.C.M. where we would operate their Triple and Acid plants at Anaconda. We would also supply our Don Plant with phosphate rock needed over and above the Gay Mine production. In July of 1960, the J. R. Simplot Company purchased the entire Conda facilities and acquired a long term lease of the mining claims and government leases. We also purchased the fertilizer production facilities of A.C.M. at Anaconda, Montana.

Conda has an interesting history. It was developed because A.C.M. needed an outlet for their sulfuric acid, which was a by-product from the copper smelter at Anaconda. Smelting of the sulfide ores produced fumes which were harmful to the surrounding area. This condition was eliminated by conversion to sulfuric acid.

A.C.M. acquired a number of phosphate claims by location and had them patented. Later they acquired additional government leases. They built a camp consisting of about seventy homes, a company store, church, school, railroad, and all other facilities to make Conda relatively self-sufficient. In 1920 Conda was isolated, especially in the winter with the railroad being their only link with Soda Springs.

Open pit equipment was unknown in those days, so all production was from underground. Only the high grade ore was mined. This was crushed and dried and put in very large wooden bins for shipment by rail to Anaconda. This method of operation was continued for thirty-five years, to 1956, at which time some open pit work was started under contract to the Morrison Knudson Company.

In 1952 or 1953 it was found that the upper high grade ore member, which they started to recover from underground, could not be used for fertilizer production without prior washing and discarding some of the impurities. This resulted in construction of an addition to the crushing and drying plant. The desired ores were crushed to a minus one-half inch, and scrubbed in a hardinge mill. The undesirable slimes produced were eliminated by separation in hydroclones.

This method of beneficiation or upgrading of the high grade hanging wall ore could be used on the phosphate shales to produce an acid grade product. However, the economics of mining shales from underground precluded their use. Only when open pit mining was started were the shales used for beneficiation.

The J. R. Simplot Company acquired the A.C.M. phosphate mining and fertilizer interests in 1959. The J. R. Simplot Company uses a mill process essentially the same as that developed by A.C.M. The ore fed to the mill averages about 24.5% P_2O_5 . The final product has an analysis of 31.5% to 32% P_2O_5 .

The Conda mining operation ceased functioning in May 1984 because a new operation, known as the Smoky Canyon Mine, had been developed.

The Conda facility continues to process phosphate ore. The incoming phosphate ore from the Smoky Canyon Mine is transported to Conda by a

25-mile long slurry pipeline. At Conda the phosphate ore is separated from the water by vacuum filters. The moist filter cake is dried and loaded in rail cars for shipment to the Don Plant where it is calcined. A calciner at Conda, which is currently shut down, is available if the phosphate ore needs to be calcined prior to shipment.

SMOKY CANYON MINE

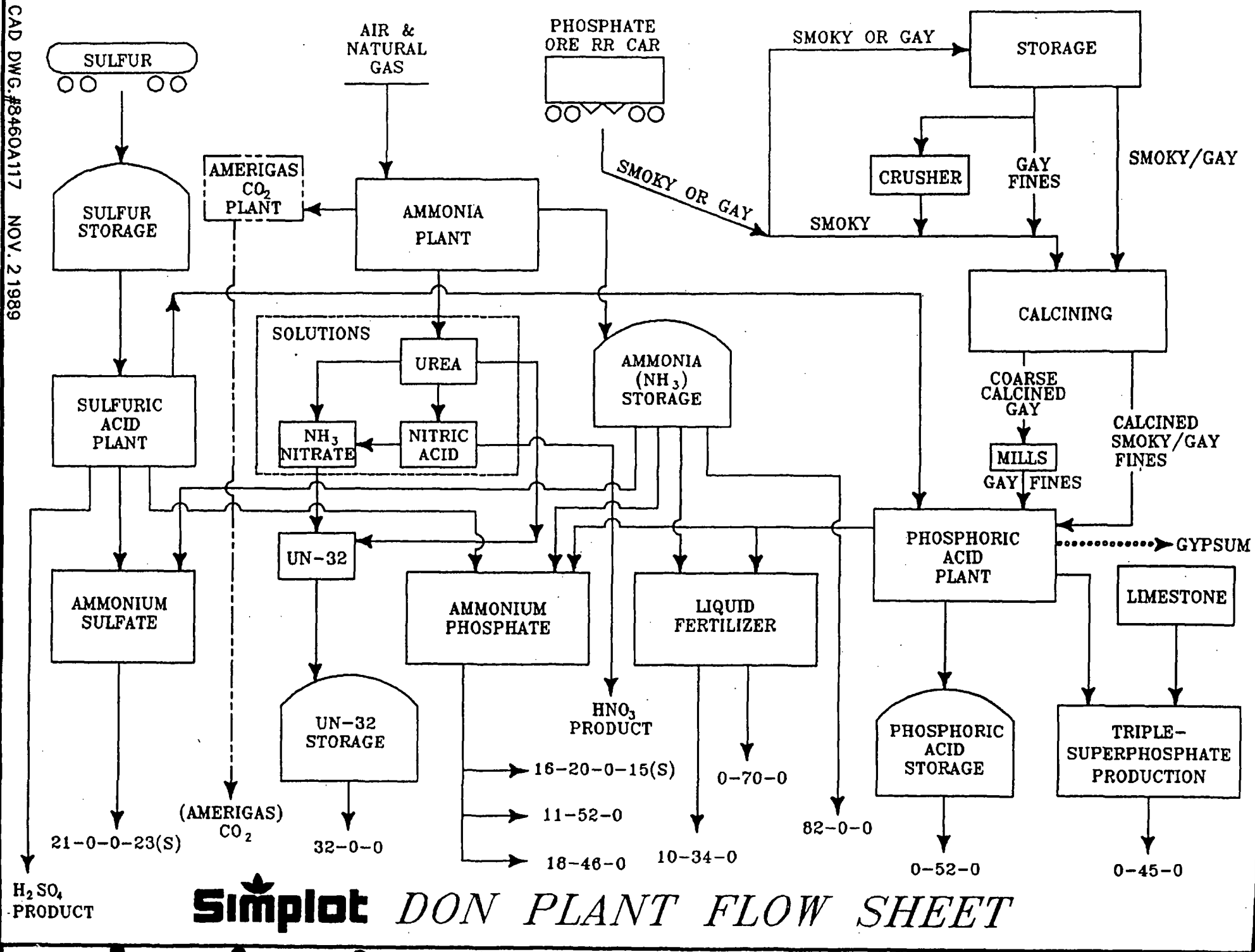
The Smoky Canyon phosphate mining/processing plant is located 25 miles east of Soda Springs, Idaho and 10 miles west of Afton, Wyoming. The mine produces about one million tons of phosphate rock per year. Overburden from the mine is initially placed in surface dumps. As areas are mined to completion, overburden from subsequent mining areas back fill the mined-out pits. The ore is beneficiated (physically washed) on site with tailings disposed of on private land about one mile east of the mine. The beneficiated ore is transported about 25 miles in a buried slurry pipeline to the existing J. R. Simplot Company plant in Conda, Idaho.

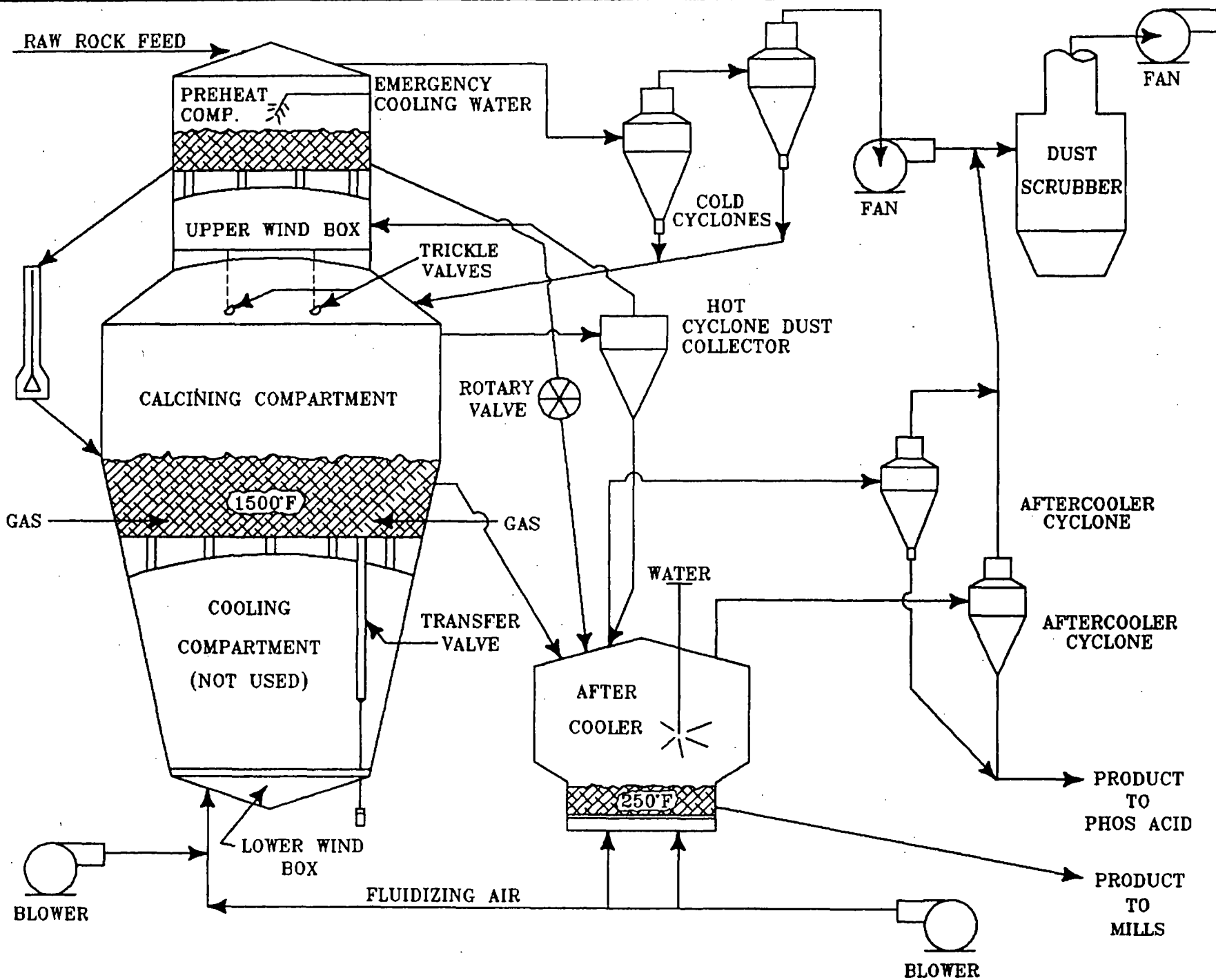
The Smoky Canyon Mine is an open pit operation using a P&H 2300 electric shovel matched with 170-ton Lectra Haul trucks. The mining and stripping operations use the same equipment. In most places the overburden must be drilled and blasted prior to stripping. The overburden and Meade Peak waste material is loaded in the 170-ton trucks and hauled to the overburden disposal area or back filled into the pits. The exposed ore in benches is mined and transported to the mill stockpile for processing and beneficiation.

The Simplot lease is on the nose of the north-plunging Boulder Creek Anticline, covering five and one-half miles of the west limb and two miles of the east limb phosphoria outcrop. Dips range from five to forty-five degrees except for the east limb, which becomes vertical to overturned near the valley floor. The phosphoria outcrop appears to be relatively free of faulting. Most of the mapped faults strike northwest and tend to repeat the section in a fashion favorable to open pit mining. Sections measured by Simplot indicate a Meade Peak member thickness of 150 feet, and a Rex Chert member

thickness of 100 to 150 feet. The ore section is one of the thickest in the Western Phosphate Field. The hanging wall or upper ore section is 23 feet thick and the foot wall or lower ore section measures about 20 feet thick.

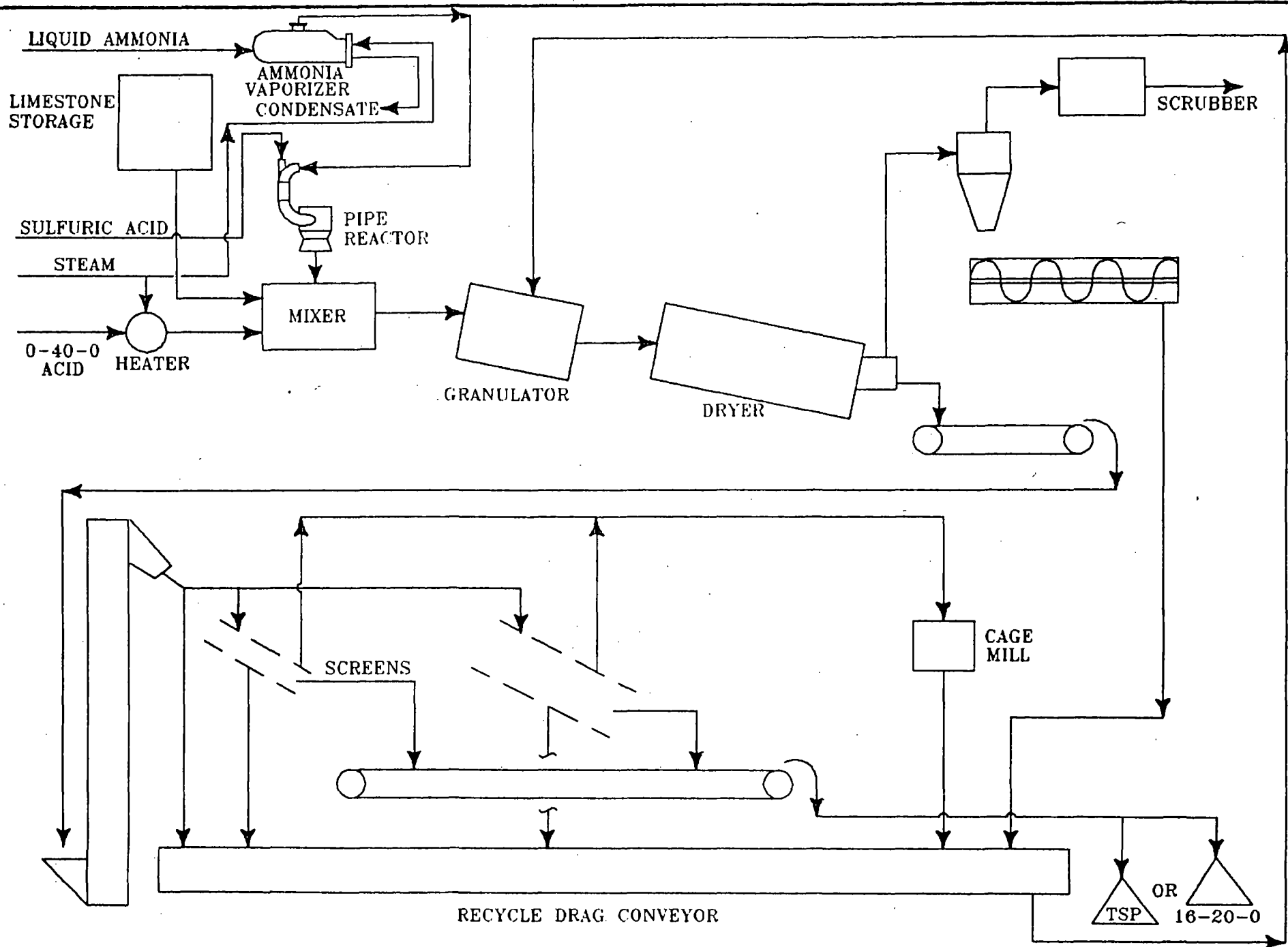
The various grades of ore are stockpiled at the Conda plant and are blended to provide a mill feed of 26% to 27% P_2O_5 . Beneficiation consists of crushing and washing, which yields a 72% BPL (33% P_2O_5) concentrate suitable for production of phosphoric acid. The ore is first screened into three size ranges: minus 6mm (-1/4"), minus 16mm to plus 6mm (-5/8" to +1/4"), and minus 22mm (-7/8"). The plus 22mm fraction is discarded. In the following stages the fine fraction reports to classifiers and hydroclones while the coarser material is reduced in a Marcy rod mill prior to entering the hydroclone system. Beneficiated product grades at +324 mesh, dewatered in Eimco vacuum filters and dried to 3% moisture. Tailings contain 10-12% P_2O_5 and 7-8% moisture, and are disposed of in an 80-acre pond. Approximately one-third of process water is recovered.



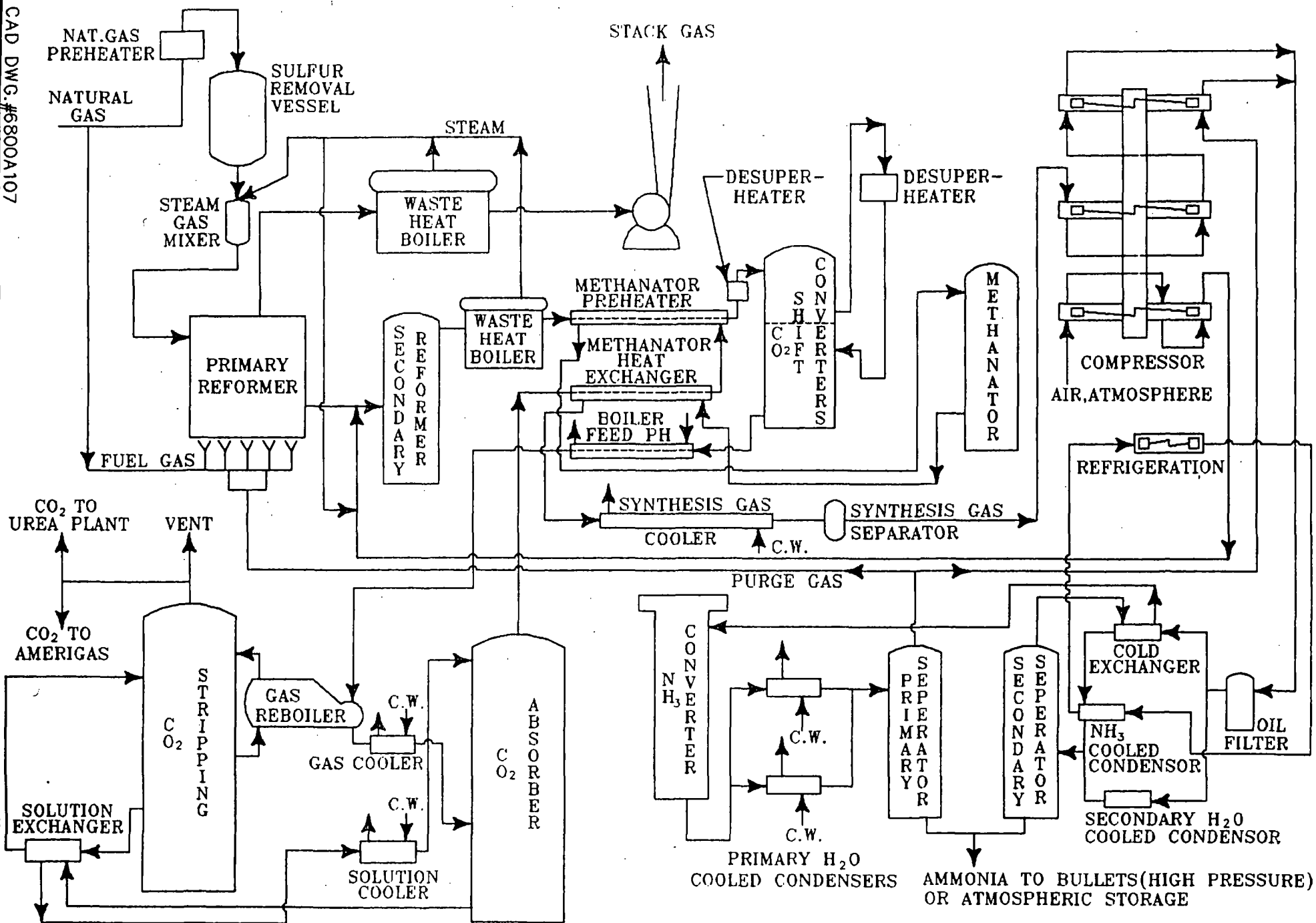


DORR FLUOSOLIDS REACTOR-CALCINER

CAD DWG#6500A170

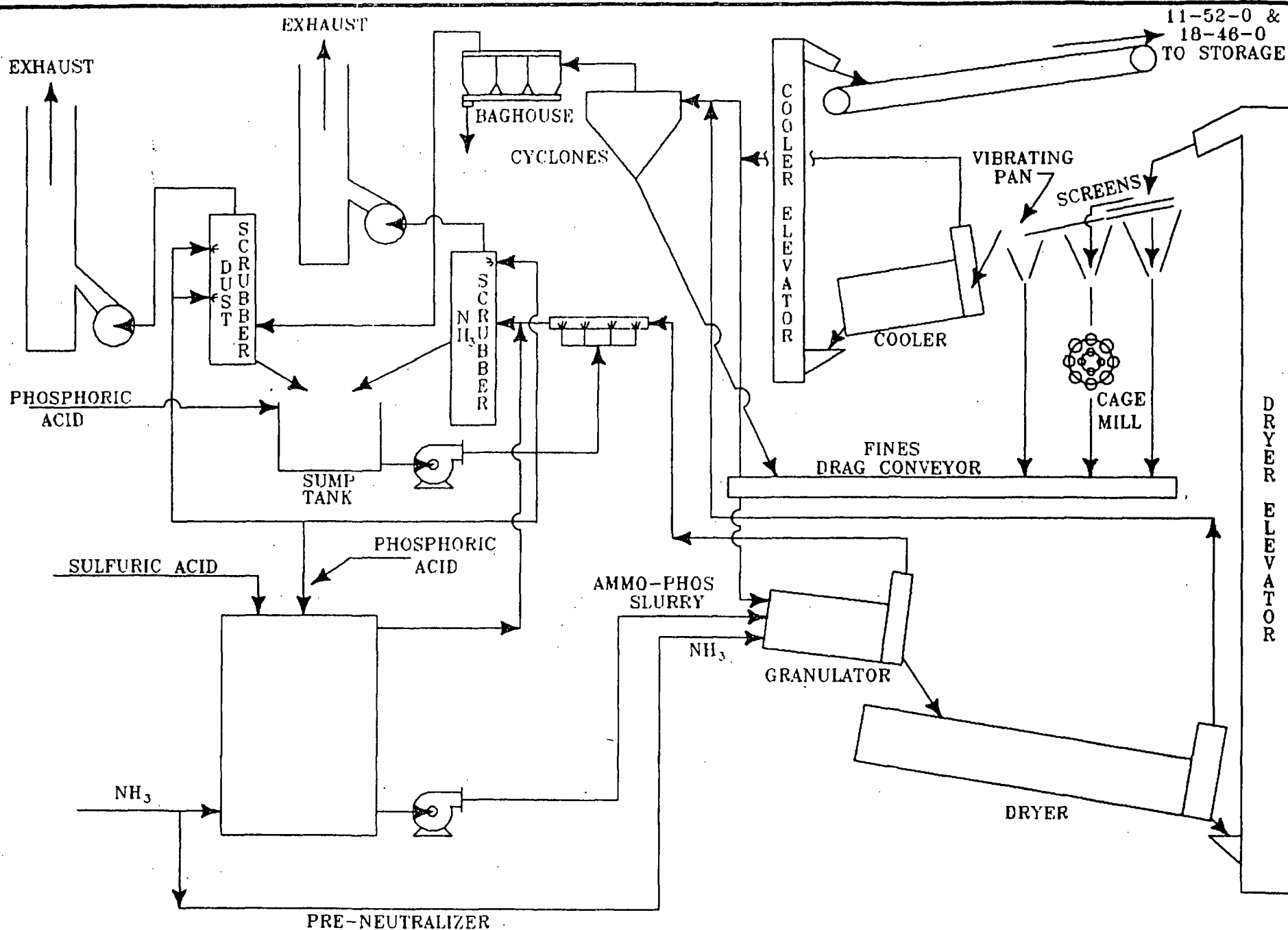


TRIPLE SUPERPHOSPHATE/16-20-0



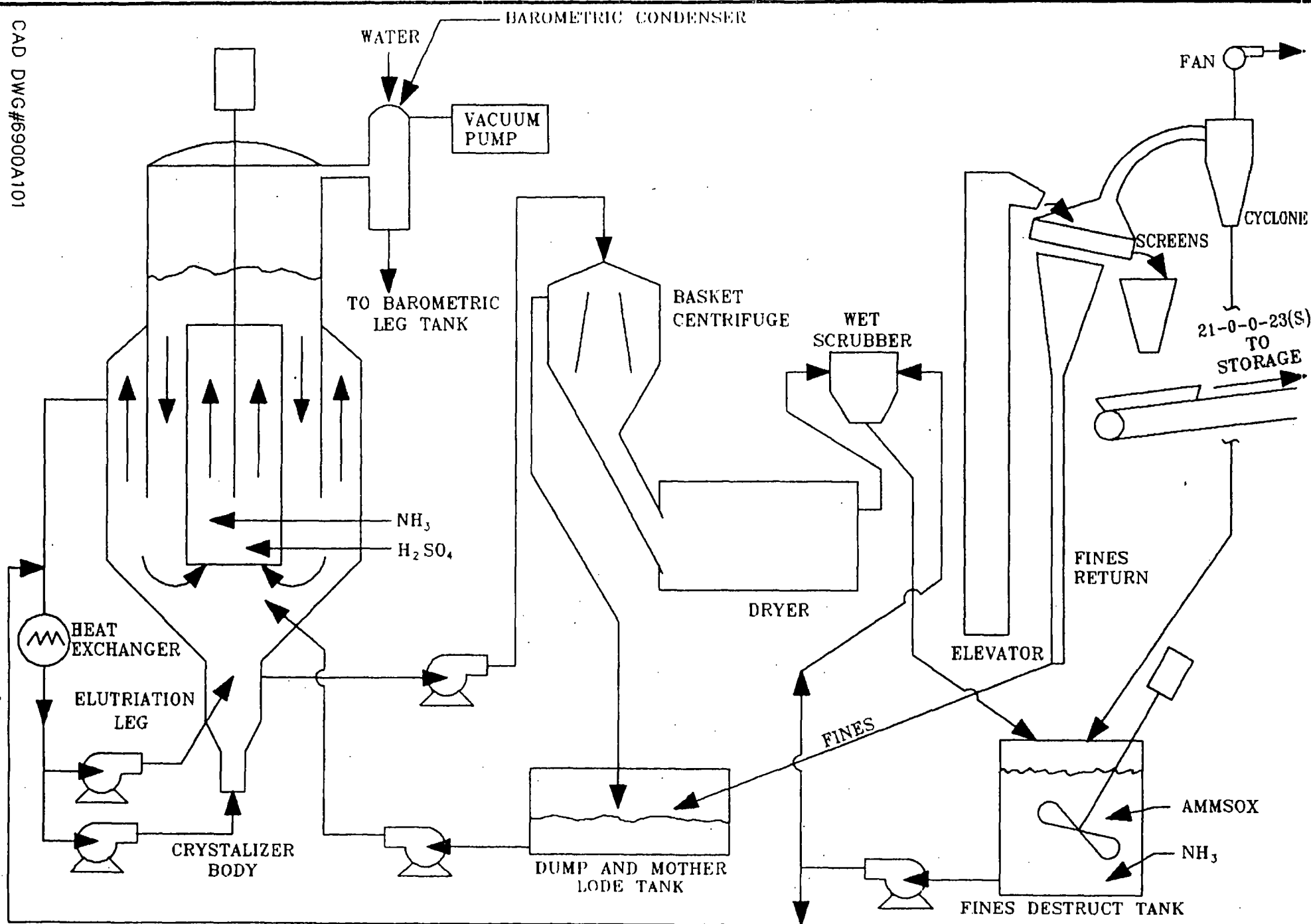
AMMONIA PLANT

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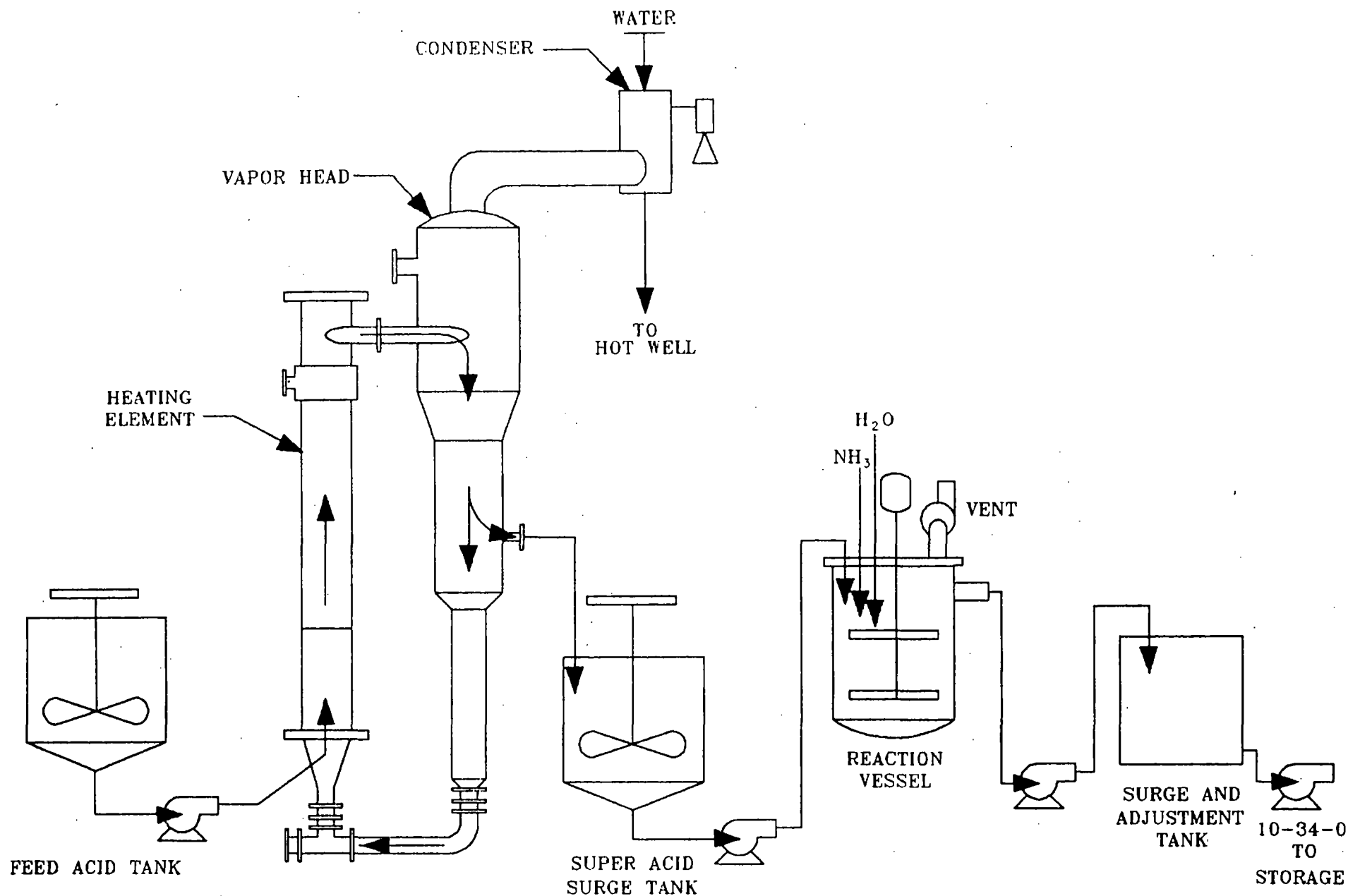


AMMONIUM PHOSPHATE PLANT

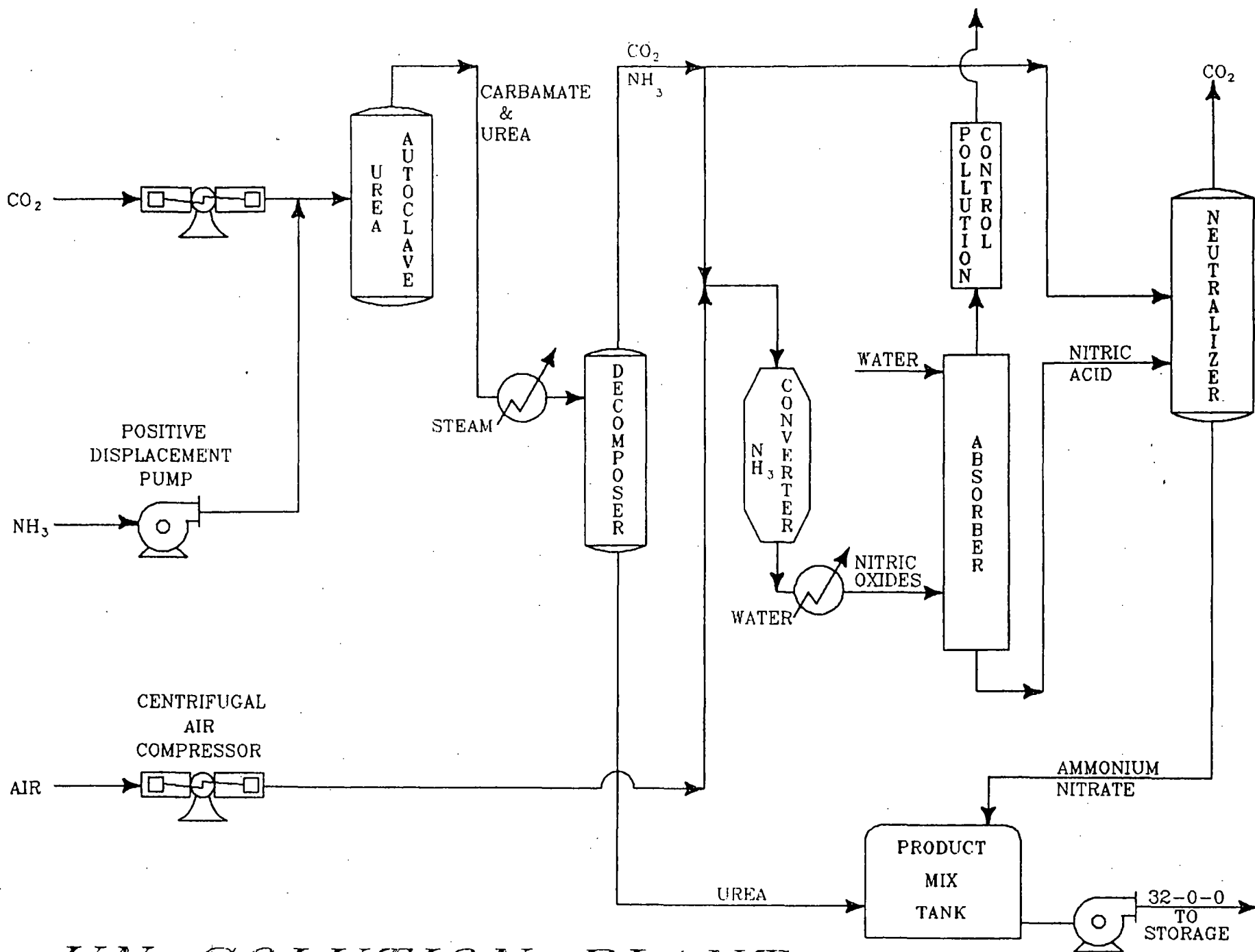
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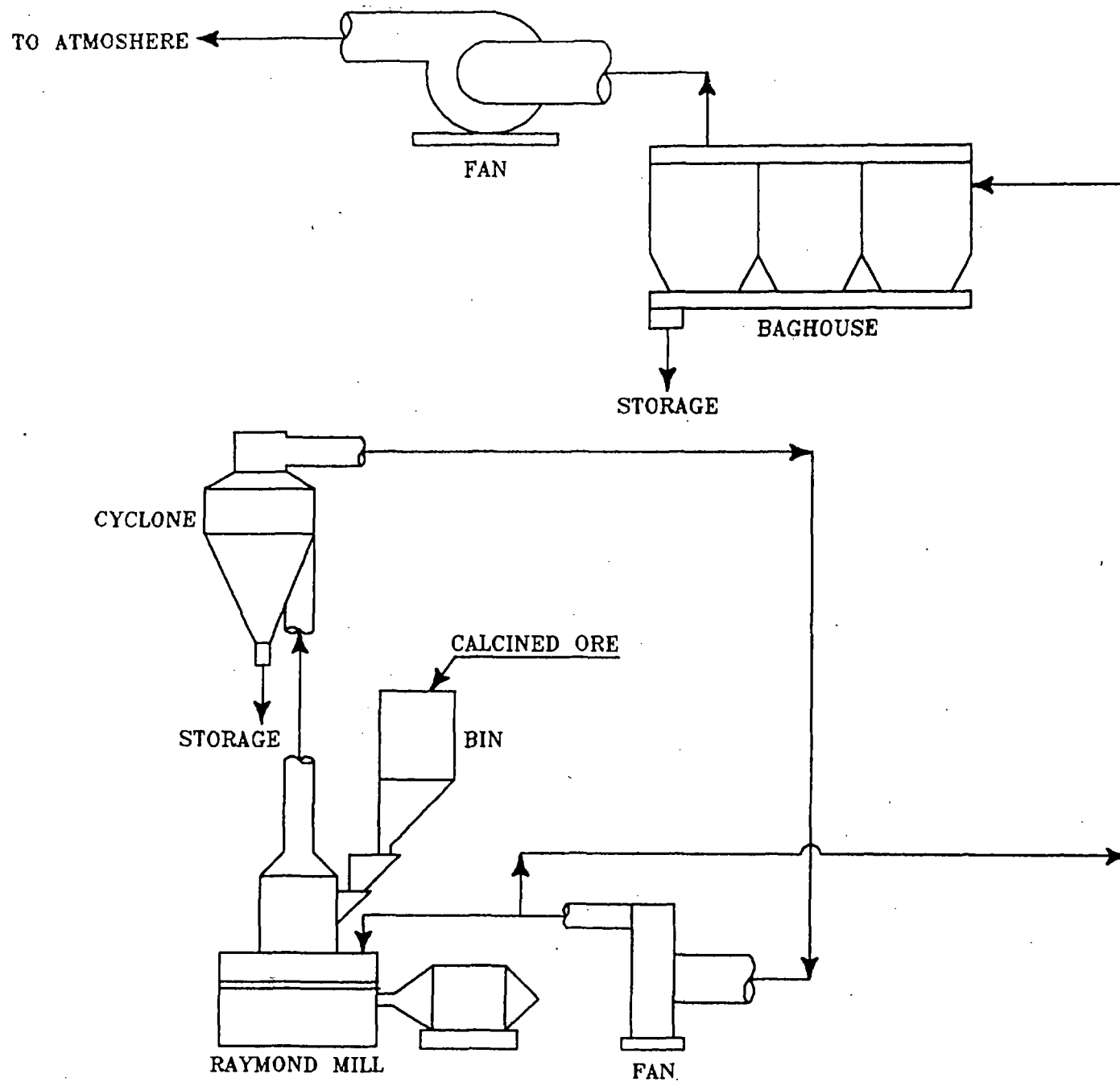
AMMONIUM SULFATE PLANT



LIQUID FERTILIZER PLANT

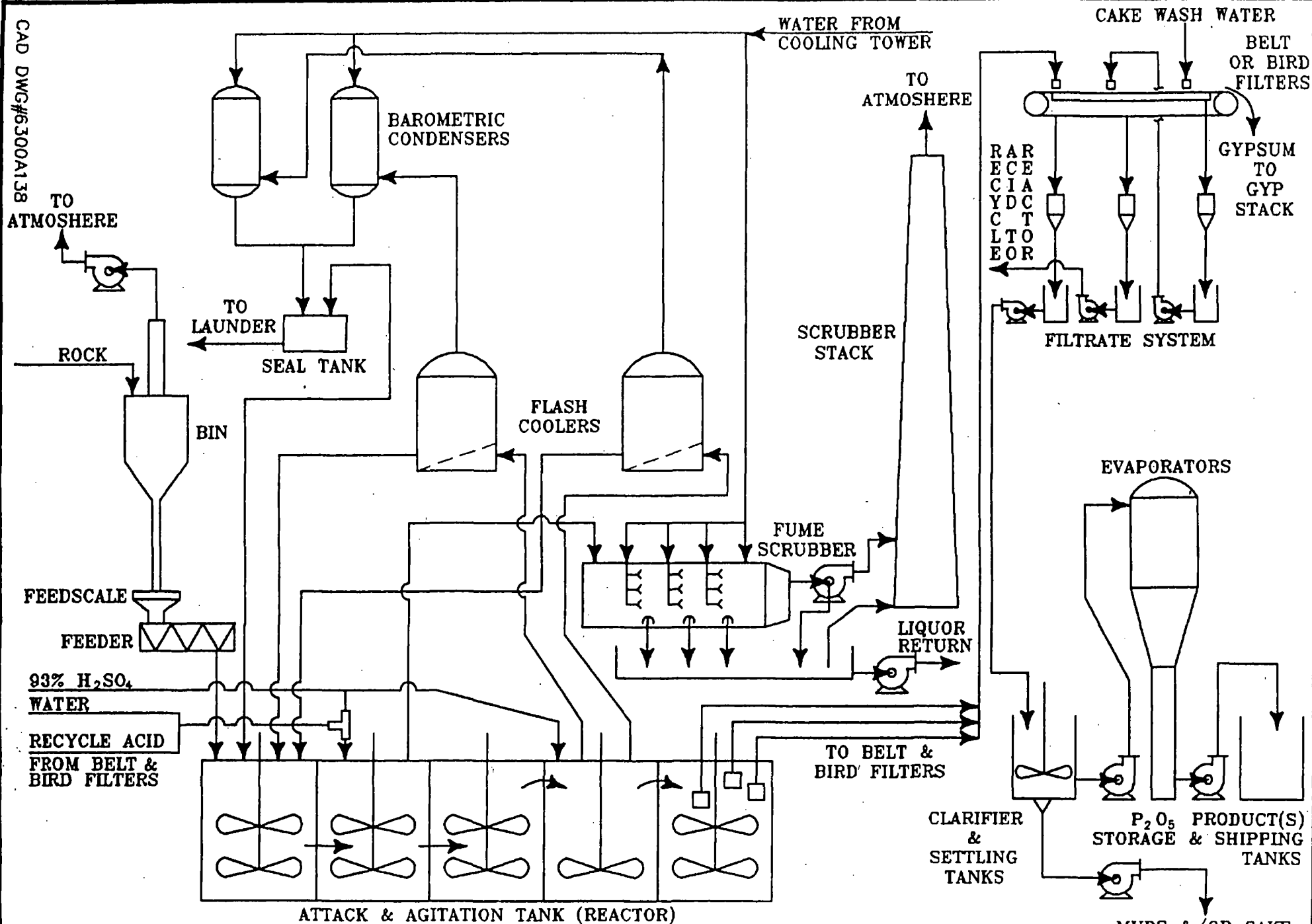


UN SOLUTION PLANT



PHOSPHATE ORE GRINDING (MILLS)

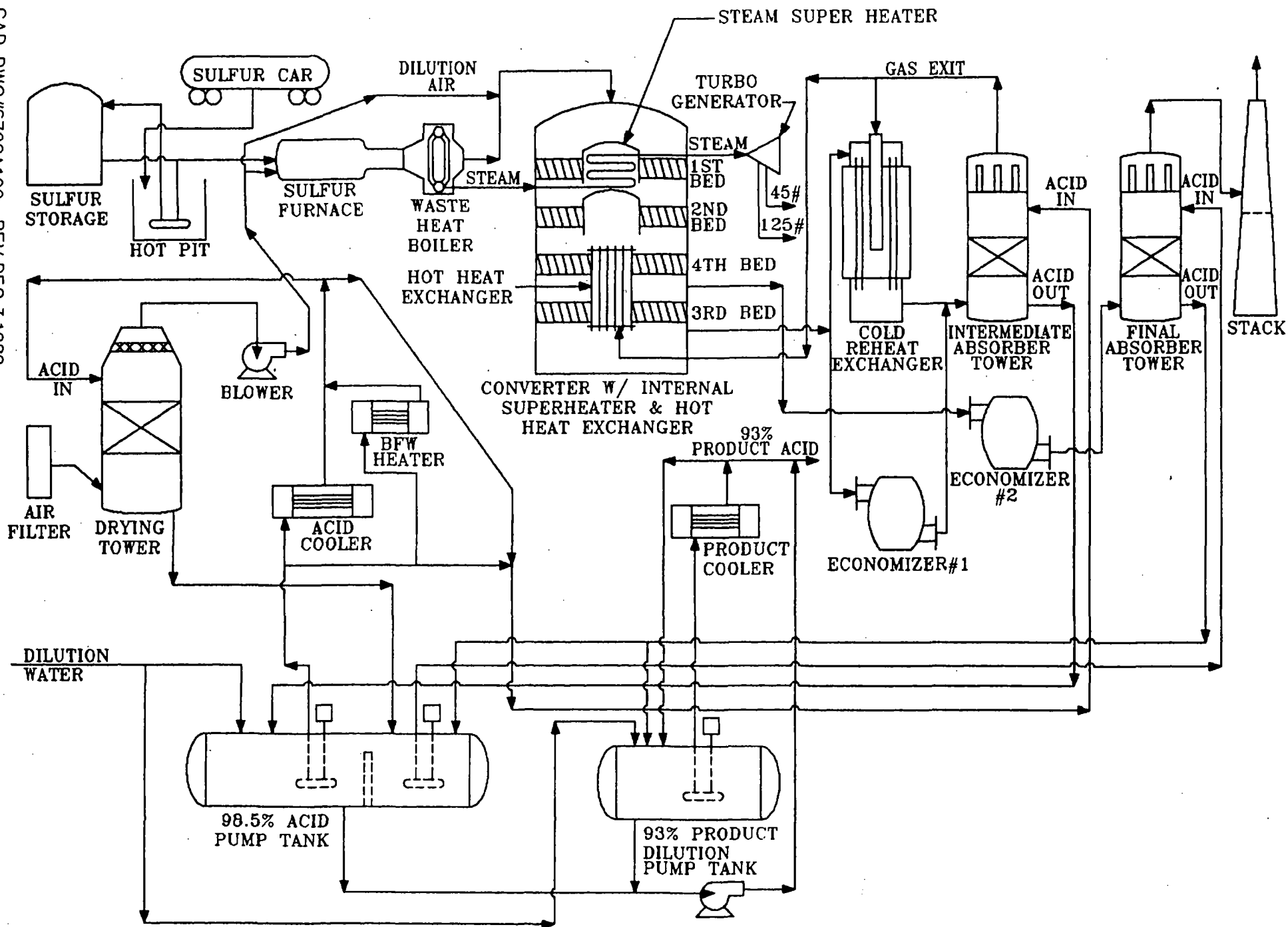
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PHOSPHORIC ACID PLANT

[illegible]

NITRIC ACID PLANT



SULFURIC ACID PLANT

12.2.1

E A S E M E N T

THIS AGREEMENT Made and entered into this _____ day of April, 1949, by and between J. R. SIMPLOT and RUBY A. SIMPLOT, his wife, and J. R. SIMPLOT COMPANY, a corporation, hereinafter known and designated as parties of the first part, and FOOD MACHINERY AND CHEMICAL CORPORATION, a foreign corporation of the State of Delaware, hereinafter known and designated as party of the second part, WITNESSETH:

That said first parties for and in consideration of the sum of One Dollar (\$1.00), to them in hand paid by said second party, the receipt of which is hereby acknowledged, and for other and valuable considerations, and in consideration of the mutual covenants on behalf of said parties, all as hereinafter contained, said first parties do sell and convey unto said second party, its successors and assigns, a strip or parcel of land of sufficient width for the construction, operation and maintenance of a waste water disposal ditch that as and when constructed and maintained will be two feet wide at the bottom and be so constructed as to adequately carry the waste water for the purposes for which it is constructed, the same to be located all as is shown by Simplot Drawing No. M - 3 - 128, dated 4/4/49, a copy of such map being hereto attached and made a part hereof; the course and direction of such ditch to be as follows, to-wit:

Beginning at the SW corner of the SW $\frac{1}{4}$ Sec. 7, T. 6 S., R. 34 E.B.M. and proceeding due north on the range line separating Section 7, T. 6 S., R. 34 E.B.M. from Sec. 12, T. 6 S., R. 33 E.B.M. a distance of 632.80 feet to a point (A). Point "A" is the point of intersection of the center line of the proposed waste water disposal ditch and the above described range line. Proceeding from point "A" on a bearing of N 72° 23' E for a distance of 324.7 ft. to station 0+00; thence S 56° 53' E for a distance of 200.0 ft. to station 2+00; thence S 36° 42' E for a distance of 100.0 ft. to station 3+00; thence on a bearing of S 45° 34' E for a distance of 300.0 ft to station 6+00; thence on a bearing of S 31° 32' E for a distance of 200.0 ft. to station 8+00; thence on a bearing of N 76° 10' E for a distance of 400.0 ft. to station 12+00; thence on a bearing of N 75° 04' E for a distance of 200.0 ft to station 14+00; thence on a bearing of N 62° 15' E for a distance

of 200.0 ft. to station 16+00; thence on a bearing of N 78° 43' E for a distance of 200.0 ft. to station 18+00; thence on a bearing of S 84° 25' E for a distance of 200.0 ft. to station 20+00; thence on a bearing of S 86° 46' E for a distance of 200.0 ft. to station 22+00; thence on a bearing of 79° 12' E for a distance of 100.0 ft. to station 23+00; thence on a bearing of N 83° 26' E for a distance of 100.0 ft. to station 24+00; thence on a bearing of N 65° 42' E for a distance of 200.0 ft. to station 26+00; thence on a bearing of S 87° 26' E for a distance of 200.0 ft. to station 28+00; thence on a bearing of S 75° 56' E for a distance of 200.0 ft to station 30+00; thence on a bearing of N 65° 52' E for a distance of 200.0 ft. to station 32+00; thence on a bearing of N 70° 59' E for a distance of 200.0 ft. to station 34+00; thence on a bearing of N 74° 22' E for a distance of 200.00 ft. to station 36+00; thence on a bearing of S 86° 30' E for a distance of 163.9 ft. to station 37+63.9 (point of intersection of existing Simplot drainage ditch); thence on a bearing of N 73° 18' E for a distance of 46.6 ft. to station 38+10.5; thence on a bearing of N 69° 20' E for a distance of 25.5 ft. to station 38+46; thence on a bearing of S 78° 00' E for a distance of 103.0 ft. to station 39+49; thence on a bearing of N 85° 42' E to point "B", the point of intersection of the center line of the proposed waste water disposal ditch and the east Simplot property line. Point "B" is situated on a bearing of N 0° 09' W of the SE corner (found) of the SW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 7, T. 6 S., R. 34 E.B.M., a distance of 606.71 ft.

The center line of the proposed Westvaco Waste water disposal ditch passes through the SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 7, T. 6 S., R. 34 E.B.M.

for the purpose of building, constructing and maintaining a drain ditch to carry waste water from second party's operations, subject to the rights of said first parties, or either of them, their heirs, assigns or successors to change or alter said course of such ditch, and likewise the right to use therefrom all or any portion of the said water draining through such ditch.

IT IS FURTHER UNDERSTOOD AND AGREED By and between the parties hereto that in the event said first parties, or either of them, their heirs, successors or assigns, desire to build an extension on the said present buildings, or any extensions in the future on their said buildings, that such extension, or extensions, would be of sufficient size or so located as to interfere with the operation of such ditch, that said second party will, upon written request, move such ditch, to the end that the construction, operation and maintenance thereof will not interfere with the building of such new buildings, extension, or extensions,

of the present or future constructed buildings, or said second party will tile such ditch, such tiling to be so performed as to serve said first parties' purpose, and said first parties herein are hereby granted the privilege to request either removal of such ditch to another location on its, or their, said premises, or that the ditch be tiled, the cost thereof to be born by said second party.

IT IS FURTHER UNDERSTOOD AND AGREED By and between the parties hereto that the right herein granted is one for the transportation of water through the lands of said first parties, and that said second party shall at all times furnish a sufficient and adequate waste-way, or drain-way, or easement of right of way for the transportation of such water from first parties premises to a point where the same enters the Portneuf River, and that as soon as said water is placed in the said ditch, as herein described, the same shall be deemed to be the property of said first parties, merely for the right to the use thereof, and not otherwise.

IT IS FURTHER UNDERSTOOD AND AGREED By and between the parties hereto that in the event said first parties desire to cross over said ditch that they shall construct adequate and proper crossings.

IT IS FURTHER UNDERSTOOD AND AGREED By and between the parties hereto that first parties shall have the privilege to construct the said ditch, the cost, however, of such construction work to be at prevailing prices and to be born by said second party.

IT IS FURTHER UNDERSTOOD AND AGREED By and between the parties hereto that the first parties reserve the right to change the course of such ditch at such time, or times, as is deemed advisable by them, or either of them, provided, however, the change shall in no wise destroy the right to have a ditch and the maintenance of a ditch sufficient in all respects to carry said waste water, and this right and privilege is in addition to the right of change heretofore mentioned.

IT IS FURTHER UNDERSTOOD AND AGREED By and between the parties hereto that when the said first parties are referred to the same shall

include all or either one of said first parties.

IN WITNESS WHEREOF The parties hereto have hereunto set their
hands the day and year first above written.

J. R. SIMPLOT

RUBY A. SIMPLOT

J. R. SIMPLOT COMPANY, a corporation,

By

President

Parties of the First Part.

ATTEST:

Secretary

FOOD MACHINERY AND CHEMICAL CORPORATION,

A Corporation,

By

*Recorded
May 11, 1949
Inst No. 67527*

*Rescinded in 1973
by a new
easement.*

EXDOC MEC # 28 File also contains various
Deeds to the Don Plant property

EASEMENT

THIS AGREEMENT, made and entered into as of the first day of July, 1973 between J. R. SIMPLOT COMPANY, a corporation (hereinafter called "Simplot") and FMC CORPORATION, a corporation, (hereinafter called "FMC")

W I T N E S S E T H:

That Simplot, for and in consideration of the sum of One Dollar (\$1.00) to it in hand paid by FMC, the receipt of which is hereby acknowledged and for other good and valuable considerations, does hereby grant and convey to FMC, its successors and assigns, an easement and right-of-way over, across and under a strip of land as hereinafter described for the construction, operation, maintenance and repair of a 36" concrete pipeline for disposal of waste water. The course and distances of such pipeline are as outlined on attached map made a part hereof, all as more particularly described as follows:

A strip of land 20.00 feet in width in Section 7, T.6S., R. 34E, Boise Meridian lying 10.00 feet on each side of the following described center line:

Commencing at the center of Section 7, T.6S., R. 34E., Boise Meridian;

Thence S29°29'33"W, a distance of 952.79 feet, to a Point on the Southerly Right of Way of U. S. Highway 30, said Point being shown on State of Idaho Highway Department drawing T-15W-4(10) 73, Sheet 11 of 45, being 75.00 feet right of the Centerline Station 29+00;

Thence S11°10'43"W, a distance of 163.65 feet, along the Westerly property line of the J. R. Simplot Company, to the True Point of Beginning;

Thence S83°46'37"E., a distance of 5.73 feet;

Thence S89°24'37"E., a distance of 381.57 feet;

Thence N15°38'23"E., a distance of 73.31 feet more or less, to a Point of Ending on the Southerly Right of Way of U. S. Highway 30.

ALSO:

A strip of land 20.00 feet in width in Section 7, T6S., R.3⁴ E., Boise Meridian, lying 10.00 feet on each side of the following described Centerline.

Commencing at the Center of Section 7, T6S., R.3⁴ E., Boise Meridian;

Thence S26°56'40"E., a distance of 1029.53 feet to a Point on the Northerly Right of Way of U. S. Highway 30, said Point being shown on State of Idaho, Highway Department drawing T-15W-4(10) 73, Sheet 11 of 45, being 103.22 feet left of Centerline Station 38+28.26;

Thence N74°29'47" W., 444.23 feet;

Thence N47°29'43" E., 86.18 feet;

Thence N64°57'43"E., 13.43 feet to the True Point of Beginning same being on the North Line of the State of Idaho Property;

Thence N64°57'43"E., 707.71 feet;

Thence N69°26'13"E., 425.00 feet, more or less, to a Point of Ending, said Point being located on the Southwesterly Bank of the Portneuf River.

FMC is hereby granted the right of ingress to and egress from the above described premises for the purpose of laying, relaying, repairing and maintaining said pipeline.

Upon the completion of said pipeline and the commencement of delivery of waste water therein by FMC, the parties hereto, as one of the considerations of this agreement, each release and relieve the other from all of the terms and conditions of a certain easement granted by J. R. Simplot Company, J. R. Simplot and Ruby Simplot, his wife, to Food Machinery and Chemical Corporation dated May 11, 1949 and bearing Instrument No. 67527.

At any time subsequent to Twenty years (20) from the date hereof that Simplot shall determine it has a requirement for the use of the property on which said pipeline is located, Simplot may request FMC to change its location, without cost to Simplot, such relocation to be over and across other

available portions of the subject Simplot premises wherein the pipeline is located as may be feasible and convenient for the relocation of said pipeline.

Simplot recognizes that the subject pipeline is to be installed at Simplot's request pursuant to the right of Simplot to request a relocation of a drainage ditch installed by FMC under the terms of the easement of May 11, 1949 hereinabove referred to; that such relocation has been a technical and costly procedure for FMC in procuring permits and easements from third parties and performing engineering work in connection with the construction and installation of such pipeline. If, subsequent to 20 years from the date hereof Simplot requests a further change in the location of the subject pipeline Simplot recognizes it may be necessary for FMC to secure other easements and permits from third parties and from governmental authorities for the further relocation of such pipeline and that FMC's ability to comply with Simplot's request for further relocation of the pipeline will be dependent upon the procurement of such other rights of way and permits as may be required; that FMC will not be required to release the subject easement until it shall have been able to procure adequate and complete permits and rights of way for the further relocation, completion and commencement of operation of said relocated pipeline.

In the event Simplot desires to install a crossing over such pipeline it agrees to take adequate precautions to so construct such crossing in such manner as not to damage said pipeline.

FMC recognizes that Simplot shall in no way be responsible for the negligence of FMC or its employees in installing and maintaining said pipeline.

FMC may abandon the subject pipeline at any time it so

desires and upon such abandonment Simplot shall be completely released of its obligations hereunder. If FMC should permanently shut down its plant thereby terminating the use of said pipeline then this easement shall be deemed abandoned and shall lapse.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first above written.

J. R. SIMPLOT COMPANY

By [Signature]
Vice President

[Signature]
Assistant Secretary

FMC CORPORATION

By [Signature]
Vice President

[Signature]
Assistant Secretary

STATE OF NEW YORK
COUNTY OF NEW YORK ss:

On this 9th day of July 1973, before me, the undersigned, a Notary Public in and for said County and State, personally appeared JOHN S. DEWICK and HAROLD VOGEL of FMC Corporation, a corporation, the corporation that executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

[Signature]
Notary Public
Residing at: NEW YORK

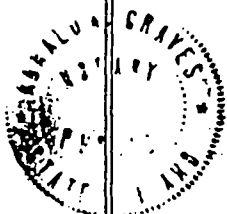
ELIZABETH A. NYERS
Notary Public, State of New York
No. 31-220773
Qualified in New York County
Commission Expires March 30, 1975

STATE OF Iceland }
COUNTY OF Ada }

ss:

On this 30th day of July 1973, before me,
the undersigned, a Notary Public in and for said County and State,
personally appeared J. E. Haight and Doris J. Stepanek
known to me to be the Vice Pres and Asst. Secretary of
J. R. SIMPLOT COMPANY, a corporation, the corporation that
executed the foregoing instrument, and acknowledged to me that
such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal, the day and year in this certificate
first above written.



(SEAL)

Ronald M. Graves
Notary Public
Residing at: Bozeman

INDEXED

101967

State of Idaho
County of Power
I hereby certify that this
instrument was filed for
record at the request of
J. R. Simpson & Co.
Filed at 11:53
o'clock P. M. this 1st
day of Aug 17 1973 and
recorded in instrument
N 101967 in Drawer
2

FILED

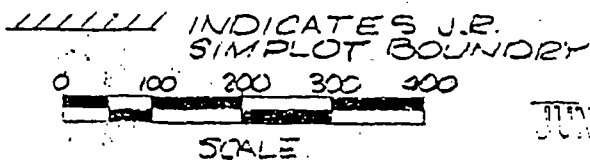
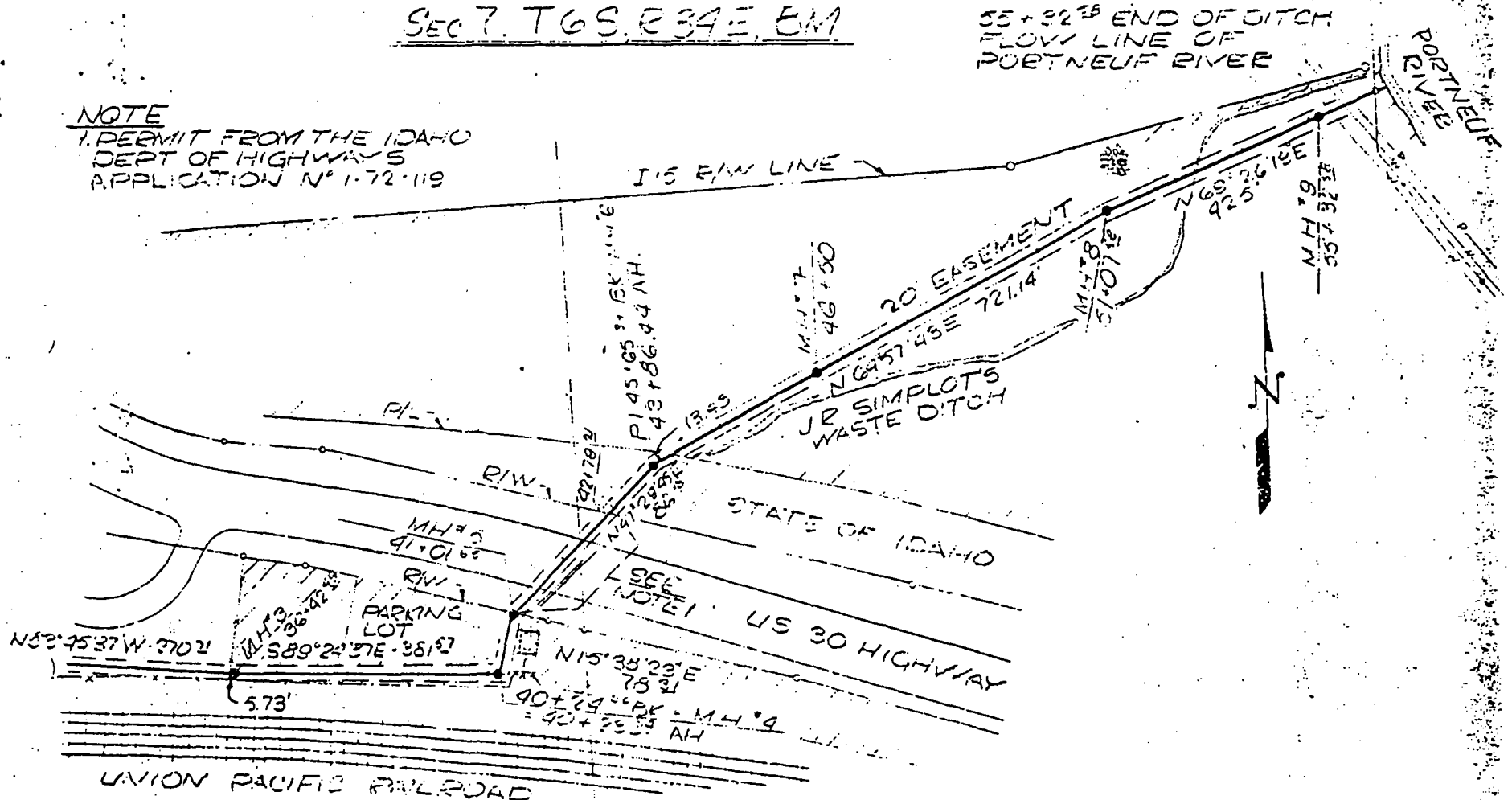
Margaret Klesch
Notary

SEC 7. T6S. R34E. E1M

55+32.35 END OF DITCH
FLOW LINE OF
PORTNEUF RIVER

NOTE

1. PERMIT FROM THE IDAHO
DEPT OF HIGHWAYS
APPLICATION N° 1-72-119



JUN 29 1973

FMC DRAINAGE DITCH
THROUGH JR SIMPLOT PROPERTY
BY DLT
6 27 73

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: November YEAR 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	33	980	388	8	2550	245	* 17
2	23	760	210	11	2700	178	15
3	11	1050	139	11	2950		18
4	15	980	176	11	2700	178	30
5	13	920	144	15	2550	459	27
6	* 10	1250	150	13	3150	491	
7	8	1170	112	8	2950	283	
8	* 13	1170	183	8	2700	259	17
9	15	1170	211	8	2700	259	20
10	13	1100	172	15	2750	495	70
11	18	1050	227	23	3000	828	102
12	178	200	427	44	2950	1558	143
13	100	920	1104	20	3300	792	
14	139	1170	1952	28	3300	1109	
15	151	270	489	23	3000	828	147
16	25	920	386	18	2950	687	92
17	30	920	331	25	2950	885	105
18	23	840	232	17	2950	602	57
19	94	920	1038	28	2750	924	46
20	57	760	520	17	3000	612	
21	33	920	364	11	3300	218	
22	72	800	691	20	2950	708	123
23	18	800	173	8	3100	298	28
24		1050		10	2950	354	
25	17	760	155	11	3000	198	
26	255	800	2448	13	2700	421	105
27	23	840	232	20	3000	720	
28	57	840	575	50	2950	1770	
29	46	700	386	48	2700	1555	72
30	165	270	535	46	2500	1380	362
31							
AVE.	58	877	489	20	2900	664	80

* Grab Samples

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATAMONTH April YEAR 1974

WEST PLANT OUTFALL			
Day	Gal/Min	ppm P (total)	lbs/day P
1	446	47	250
2			
3	534	44	281
4	544	55	358
5	549	20	134
6	680	65	530
7	680	70	572
8	618	10	74
9	632	7	56
10	759	73	666
11	680	331	2701
12	708	114	969
13	680	38	312
14	680	9	73
15	628	6	48
16	680	24	196
17	679	11	90
18	592	7	48
19	821	7	73
20	850	41	414
21	850	51	523
22	758	11	96
23	771	4	38
24	771	5	50
25	588	7	51
26	748	93	836
27	680	103	840
28	720	6	50
29	679	8	64
30	748	4	34
31			
Avg.	680	44	360

16" drain
diverted to
west outfall
4/11/74
G. F. Cochran

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH March

YEAR 1974

Day	WEST PLANT OUTFALL			EAST PLANT OUTFALL		
	Gal/Min	ppm P (total)	lbs/day P	Gal/Min	ppm P (total)	lbs/day P
1	650	192	1498	70	100	84
2	575	154	1063	70	50	42
3	600	237	1706	70	46	39
4	500	71	428	70	39	33
5	600	280	2016	70	14	12
6	600	146	1051	70	105	88
7	600	213	1533	297	49	174
8	500	250	1500	261	11	35
9	550	128	845	247	8	25
10	550	53	350	247	6	19
11	600	51	364	342	6	24
12	600	64	460	324	8	29
13	400	64	309	324	9	34
14	500	47	284	252	8	25
15	400	199	955	225	34	90
16					12	
17	700	191	1604		11	
18	900	57	617	216	7	19
19	338	27	109	270	8	27
20	397	37	177	252	8	25
21	338	21	87	280	11	36
22	338	23	93	256	11	34
23	700	552	4637	238	8	21
24	650	29	227	238	7	19
25	367	13	57	238	6	18
26	397	12	57	324	7	28
27	367	138	608	324	13	52
28	462	95	524	288	21	74
29	429	217	1117	202	23	55
30		104		261	18	56
31		67		270	6	18
Avg.	522	124	867	225	21	43

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH

February

YEAR

1974

Day	WEST PLANT OUTFALL			EAST PLANT OUTFALL		
	Gal/Min	ppm P (total)	lbs/day P	Gal/Min	ppm P (total)	lbs/day P
1	400	391	1877	315	57	217
2	450	209	1129	360	5	20
3	425	61	310	360	4	17
4	550	79	519	315	5	20
5	550	64	423	324	11	43
6	600	148	1065	279	16	53
7	600	52	376	279	16	55
8	500	71	428	275	12	40
9	650	90	701	250	5	16
10	525	38	237	225	8	22
11	400	48	230	275	129	426
12	600	37	263	300	24	88
13	700	60	501	225	6	15
14	750	55	496	250	7	22
15	700	46	388	275	13	43
16	725	8	72	325	5	19
17	725	1	8	325	11	43
18						
19	800	3	25	350	16	69
20	950	29	327	300	14	50
21	450	19	102	320	9	33
22	400	18	85	275	11	35
23	135	86	139	300	13	48
24	375	54	244	300	9	33
25	400	32	155	350	8	34
26	400	90	436	250	38	112
27	400	41	196	300	18	65
28	500	38	230		134	
29						
30						
31						
Avg.	543	69	406	296	21	63

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH

January

YEAR

1974

Day	WEST PLANT OUTFALL			EAST PLANT OUTFALL		
	Gal/Min	ppm P (total)	lbs/day P	Gal/Min	ppm P (total)	lbs/day P
1	350	14	57	158	6	12
2	450	11	59	315	4	14
3	500			315	6	21
4	300			315	9	33
5				315	13	49
6				360	6	26
7	400			315	4	14
8	325	12	46	342	29	12
9	500	25	150	342	8	35
10	500	170	1020	342	4	14
11	500	59	354	342	280	1149
12	550	279	1841	333	3	10
13	650	116	905	315	40	151
14	200	127	305	243	113	330
15	850	170	1734	315	46	175
16	500	255	1530	320	8	31
17	500	233	1398	315	11	42
18	350	36	150	315	17	62
19	400	298	1430	212	66	167
20	500	147	882	360	19	83
21	300	231	832	342	21	88
22	600	127	914	360	14	61
23	575	167	1152	342	8	34
24	500	99	595	342	10	43
25	550	119	785	315	11	41
26	375	221	994	212	13	33
27	525	48	301	252	17	52
28	600	119	857	405	47	226
29	400	77	369	342	6	26
30	500	5	300	261	28	89
31	400	66	316	202	3	8
Avg.	471	124	731	309	28	105

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH December

YEAR 1973

Day	WEST PLANT OUTFALL			EAST PLANT OUTFALL		
	Gal/Min	ppm P (total)	lbs/day P	Gal/Min	ppm P (total)	lbs/day P
1	450	41	221	270	6	18
2	450	14	76	405	5	23
3	575	15	100	342	5	19
4	600	22	158	274	6	20
5	500	12	71	324	5	19
6	825	9	93	279	41	136
7	700	4	37	261	99	310
8	400	12	58	405	11	54
9	475	7	40	405	7	34
10	500	3	17	238	5	14
11	500	10	62	324	5	20
12	500	19	115	342	6	25
13	500	12	71	342	6	23
14	500	42	253	342	6	24
15	400	43	206	405	6	28
16	300	26	94	486	4	26
17	300	6	20	342	10	42
18	300	113	407	342	19	80
19	300	30	109	342	6	23
20	300	25	90	342	3	14
21	300	192	691	342	7	28
22	450	78	420	450	44	239
23	350	256	1075	360	11	46
24						
25						
26	300	36	131	360	10	43
27	425	22	111	243	5	16
28	450	59	320	270	16	53
29	375	49	219	405	6	31
30	300	88	316	405	5	26
31	325	5	21	315	7	26
Avg.	436	43	193	341	13	50

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATAMONTH November YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN	
	ppm P (Total)	Gal/Min	lbs/day P	ppm P (Total)	Gal/Min	lbs/day P	ppm P (Total) **	
1	20	700	167	78	490	460		
2	32	800	310	45	490	263		
3	5	775	44	19	575	128		
4	-	800	-	59	650	463		
5	47	850	481	190	540	1231		
6	56	800	537	37	400	178		
7	44	750	400	19	400	91		
8	217	750	1953	21	350	86		
9	100	700	840	4	310	14		
10	44	650	342	7	450	36		
11	7	625	53	15	450	79		
12	9	675	75	5	310	17		
13	131	600	943	49	355	210		
14	55	500	328	5	380	21		
15	29	800	275	16	365	68		
16	12	1100	161	2	355	6		
17	171	-	-	24	-	-		
18	124	650	967	-	410	-		
19	42	475	239	19	310	69		
20	33	500	196	19	360	83		
21	12	390	55	3	270	11		
22	35	400	167	98	310	364		
23	13	400	61	133	270	431		
24	5	400	24	164	280	551		
25	11	650	85	3	400	13		
26	7	420	35	5	270	15		
27	5	420	25	3	280	10		
28	46	410	227	4	285	12		
29	668	480	3848	3	290	10		
30	31	450	168	3	280	11		
31								
Ave.	69	618	464	36	375	176		

The FMC ditch was rerouted October 26, 1973. The east outfall now contains only the water previously reported at the 10" drain, except for occasional spills picked up from the reclaim water system.

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH October

YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm P (Total)	Gal/Min	lbs/day P	ppm P (Total)	Gal/Min	lbs/day P	ppm P (Total)
1	10	800	96	13	2430	379	38
2	19	800	182	20	2295	551	82
3	61	800	586	6	2430	175	10
4	6	825	59	11	2295	303	31
5	15	875	158	7	1980	166	17
6	7	750	63	13	2295	358	
7	8	750	72	12	2430	350	
8	94	1000	1128	21	2430	612	34
9	489	950	5575	25	2160	648	458
10	25	900	270	4	2295	110	8
11	12	1000	144	10	2160	259	49
12	7	775	65	5	2295	138	8
13	8	650	62	6	1935	139	
14	7	675	57	8	2655	255	
15	3	800	29	3	1980	71	7
16	-	800	-	-	1980	-	-
17	7	850	71	11	2295	303	7
18	8	850	82	3	2295	83	9
19	9	850	92	9	2295	248	16
20	5	700	42	7	1980	166	-
21	5	750	47	7	1845	155	-
22	5	750	43	18	2000	432	10
23	18	650	140	19	2070	472	11
24	28	650	219	7	2160	181	6
25	20	750	184	6	1845	126	7
26	7	775	64	5	340	21	Discontinued
27	3	725	29	6	450	32	FMC ditch
28	7	675	57	49	360	210	removed
29	6	850	56	40	340	164	
30	13	775	117	51	340	209	
31	22	700	183	31	340	125	
Ave.	31	789	332	14	1839	248	45

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATAMONTH: September YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	62	700	534	13	2150	344	
2	420	725	3745	67	2400	1978	
3							
4	30	950	351	10	2700	315	53
5	42	1000	517	13	2550	408	15
6	57	820	575	10	2550	298	8
7	30	850	314	15	800	148	7
8	200	-	-	50	2550	1568	
9	340	700	2927	40	2300	1132	
10	35	800	344	20	2550	627	105
11	28	875	301	14	2550	439	14
12	20	750	184	17	2700	565	18
13	19	850	199	13	2550	408	5
14	17	975	204	15	2550	470	8
15	17	650	136	13	2400	384	
16	15	675	125	25	2200	676	
17	18	850	188	16	2550	502	8
18	14	875	151	15	2550	470	15
19	11	850	115	7	2550	220	17
20	15	850	157	11	2550	345	7
21	18	850	183	13	2400	384	8
22	15	700	129	18	2750	609	
23	127	675	1054	28	2150	740	
24	28	800	276	14	2700	465	19
25	120	800	1180	14	2550	439	23
26	460	850	4809	15	2550	470	35
27	57	750	526	15	2400	443	18
28	150	750	1384	17	2700	565	23
29	173	725	1543	20	2200	541	
30	105	700	904	42	2500	1292	
31							
AVE.	91	771	823	20	2353	595	21

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: August YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	27	750	243	8	2700	259	15
2	17	800	163	9	2700	308	13
3	198	750	1782	222	2550	6793	13
4	-	750	-	-	3000	-	
5							
6	57	800	547	8	2550	245	22
7	61	600	439	11	2550	337	11
8	18	650	140	7	2300	193	11
9	12	625	90	5	2550	153	3
10	25	725	218	8	2500	240	13
11							
12							
13	13	750	117	11	2350	310	17
14	17	700	143	13	2550	398	14
15	11	700	92	9	2400	259	17
16	55	750	495	25	2400	720	65
17	20	650	156	13	2700	421	24
18	15	440	79	20	1950	468	
19	5	500	30	8	2700	259	
20	10	600	68	15	2650	477	20
21	53	650	413	13	2500	390	27
22	1350	725	11745	23	2700	745	38
23	86	700	722	18	2500	540	42
24	87	1100	1148	20	2450	588	55
25	890	700	7476	13	2700	421	
26	15	400	72	18	1900	410	
27	300	750	2700	102	3100	3794	54
28	600	800	5760	200	2700	6480	37
29	110	550	726	27	2950	956	9
30	33	700	277	15	2400	432	17
31	135	700	1134	14	2550	428	17
AVE.	156	690	1369	32	2555	1001	24

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: JULY YEAR 1973

DAY	WEST PLANT CUTFALL			EAST PLANT CUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	28	525	176	7	2950	248	
2	18	600	130	9	3500	378	15
3	22	695	183	7	-	-	2
4	-	-	-	-	-	-	-
5	16	700	134	6	3500	252	8
6	13	900	140	8	2700	259	11
7	7	500	42	5	2500	150	
8	12	550	79	8	2700	259	
9	15	675	122	12	2950	425	8
10	14	650	109	7	3100	260	8
11	15	650	117	13	3100	484	7
12	3	650	23	3	3300	119	6
13	27	600	194	14	3700	622	17
14	55	525	346	11	3000	396	
15	13	500	78	-	2700	-	
16	12	600	86	11	3300	436	11
17	7	625	53	8	2750	264	8
18	8	625	60	9	2700	292	12
19	7	650	55	-	2400	-	11
20	-	700	-	31	2400	893	169
21	310	525	1953	-	2500	-	
22	86	525	542	-	2400	-	
23	151	800	1450	28	2700	891	-
24	130	725	1131	7	2400	202	46
25	98	800	941	16	2700	518	27
26	16	650	125	8	2400	216	8
27	70	650	546	7	2400	202	15
28	236	590	1671	9	3150	340	
29	30	600	216	8	2150	206	
30	20	550	132	8	3500	336	8
31	139	750	1251	11	3100	409	27
AVE.	54	636	417	10	2848	362	21

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: June YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	44	800	422	6	3500	252	7
2	32	700	269	9	2400	259	
3	17	550	112	8	2950	283	
4	17	650	133	12	3500	504	9
5	19	975	222	12	3500	504	9
6				9	3300	356	
7	13	600	94	8	3700	355	13
8	17	800	163	8	3700	355	16
9	244	800	2342	13	3100	484	
10	95	430	490	8	2500	240	
11	78	575	538	143	3300	5663	13
12	33	475	188	16	3300	634	5
13	50	500	300	8	2700	259	5
14	112	425	571	11	3500	462	12
15	720	-	-	23	3500	966	63
16	1130	250	3390	8	3000	288	
17	169	-	-	13	2650	413	
18	1170	450	6318	19	3700	844	35
19	80	450	432	12	3500	504	13
20	25	600	180	8	3700	355	7
21	42	450	227	5	3700	222	6
22	222	450	1199	13	3300	515	11
23	65	350	273	10	2500	300	
24	27	270	88	13	2200	343	
25	8	450	43	9	3700	400	8
26	167	450	91	13	3700	577	16
27	-	-	-	7	3100	260	9
28	390	575	2691	14	3100	521	8
29	280	550	1848	10	3100	372	8
30	362	500	2172	11	3000	396	
31							
AVE.	201	541	985	15	3220	596	14

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: May YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	120	540	778	6	2950	212	5
2	215	550	1419	2	3100	744	2
3	18	650	140	11	2950	389	6
4	49	550	323	11	2950	389	9
5	54	920	596	15	3000	540	
6	23	310	86	15	3100	558	
7	8	550	53	16	3300	634	28
8	14	700	118	27	3500	1134	195
9	70	600	504	13	3700	577	20
10	6	600	43	11	3500	462	12
11	24	600	173	9	3300	356	6
12	19	1100	251	7	2700	227	
13	54	490	318	7	2950	248	
14	48	600	346	13	3300	515	8
15	62	1000	744	400	2700	12,960	15
16	23	750	207	9	3300	356	8
17	20	650	156	11	3300	436	13
18	16	650	125	8	2950	283	14
19	25	700	210	11	3100	409	
20	19	650	148	21	2950	743	
21	13	800	125	28	2700	907	---
22	11	750	99	9	3100	335	12
23	18	600	130	9	2950	319	9
24	13	800	125	14	3500	588	25
25	80	850	816	13	3500	546	39
26	342	600	2462	7	2700	227	
27	70	700	588	8	2550	245	
28	---	---	---	---	---	---	---
29	31	1300	484	12	3100	446	7
30	17	850	173	9	3100	335	9
31	11	800	106	8	3500	336	8
AVE.	50	707	395	25	3110	856	21

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: April

YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	97	1350	1571	7	2750	231	11
2	137	325	534	10	3100	372	18
3	115	400	552	13	2400	374	13
4	55	450	297	13	3100	484	15
5	198	500	1188	17	2550	520	9
6	57	450	308	10	3000	360	
7	53	640	407	37	2950	1310	
8	30	640	230	12	2050	295	
9	25	640	192	-	3300	-	18
10	8	-	-	8	3700	355	8
11	15	800	144	7	3700	311	4
12	236	775	2195	10	3500	420	8
13	190	600	1368	12	3100	446	25
14	72	590	510	8	2200	211	
15	11	440	58	29	2550	887	
16	12	440	63	6	2550	184	8
17	57	400	274	15	3300	594	21
18	87	500	522	13	3100	484	14
19	18	400	86	11	3500	462	10
20	27	500	162	8	3100	298	6
21	48	490	282	10	300	36	
22	15	270	49	12	3000	432	
23	9	270	29	14	3000	504	12
24	18	850	184	14	3400	571	13
25	28	850	286	8	3500	336	6
26	12	400	58	8	2650	254	7
27	18	600	130	8	2700	259	5
28	25	760	228	16	2500	480	
29	36	1050	454	8	3300	317	
30	17	450	92	8	3300	317	7
31							
AVE.	58	580	429	12	2905	417	11

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: MARCH YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	22	700	185	35	2550	1071	16
2	155	150	279	21	2400	605	46
3	82	350	344	73	2400	2102	
4	29	1100	383	12	2500	360	
5	17	900	184	17	2550	520	8
6	17	150	31	17	2950	602	8
7	-	850	-	12	2550	367	8
8	11	350	46	7	3150	265	7
9	28	800	269	11	2550	337	8
10	-	400	-	27	2550	826	
11	115	1650	2277	13	2700	421	
12	108	600	778	15	3000	540	18
13	28	1200	403	13	3150	491	11
14	74	200	178	11	3400	449	17
15	42	950	479	8	3400	326	13
16	18	900	194	9	2650	286	11
17	50	920	552	13	3100	484	
18	115	980	1352	20	2550	612	
19	48	400	230	19	2700	616	17
20	39	600	281	10	2950	354	6
21	7	1200	161	10	3300	396	8
22	45	300	162	14	3300	554	8
23	75	400	360	13	2550	398	17
24	45	310	167	15	2300	414	
25	12	980	141	16	2050	394	
26	6	250	18	7	3500	294	17
27	8	375	36	7	3500	294	7
28	18	325	70	295	3100	10974	5
29	20	500	120	173	2950	6124	11
30	15	850	153	19	2700	616	11
31	252	940	2843	8	2750	264	
AVE.	52	664	435	30	2831	1044	12

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: FEBRUARY YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	17	275	56	22	2050	541	78
2	15	300	54	27	2950	956	171
3	39	400	187	65	2500	1950	
4	35	490	206	33	2150	851	
5	17	875	178	50	2050	1230	276
6	50	500	300	65	2400	1872	233
7	27	800	259	18	2400	518	58
8	35	850	357	13	2400	374	18
9	135	850	1377	15	2500	450	38
10	168	230	464	18	2500	540	
11	244	760	2225	27	2400	778	
12	145	700	1218	25	2200	660	39
13	95	12	13	15	2550	459	52
14	35	750	315	18	2700	583	44
15	36	775	335	13	2550	398	13
16	10	950	114	6	2550	184	13
17	30	1050	378	33	2550	1010	
18	18	310	67	3	2300	83	
19							
20	16	500	96	18	2950	637	53
21	13	700	74	13	3000	468	34
22	49	12	7	8	2700	259	34
23	23	600	166	19	2400	547	53
24	18	80	17	55	2400	1584	
25	19	400	91	89	2500	2670	
26	157	250	471	28	2550	857	16
27	290	10	35	155	2650	4931	46
28	22	250	66	35	2550	1071	10
29							
30							
31							
AVE.	65	507	338	33	2496	980	67

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: January YEAR 1973

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	92	1150	1270	28	2700	907	
2	35	950	399	11	2550	337	8
3	215	1000	2580	3	3500	126	3
4	33	1100	436	11	2400	317	18
5		1000			2950		204
6		310			2700		
7	20	930	223	49	2200	1294	
8	61	950	695	20	2550	612	105
9	46	1200	662	15	2700	486	13
10	315	1000	3780	20	2700	648	83
11	490	950	5586	14	2700	454	28
12		300			2550		90
13		440			2050		
14	270	1050	3402	7	1850	155	
15	170	600	1224	37	2300	1021	200
16	234	700	1966	23	2400	662	35
17	320	700	2688	13	2400	374	20
18	44	300	158	11	2550	337	13
19		600			1950		13
20		800			2400		
21	36	920	397	13	1850	289	
22	38	12	5	17	2700	551	15
23	37	1050	466	11	2550	337	8
24	62	800	595	12	2700	389	17
25	222	350	932	17	2950	602	44
26		875			2700		18
27		920			2300		
28	160	810	1555	15	2550	459	
29	60	175	126	11	2550	337	8
30	78	200	187	17	2550	520	18
31	44	700	370	35	2550	1071	151
AVE.	134	723	1291	18	2482	487	51

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: December YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	-	1000	-	-	2550	-	33
2	-	540	-	-	2550	-	
3	380	230	1049	18	2400	518	
4	20	925	222	-	2400	-	48
5	-	545	-	28	2200	739	74
6				18	2400	518	52
7	670	-	-	24	2400	691	37
8	-	500	-	25	2400	720	112
9				2	2700	65	
10				16	2700	518	
11	1270	-	-	20	2550	612	15
12	570	475	3249	20	2700	648	5
13	98	700	823	17	2550	520	5
14	65	700	546	18	2700	583	7
15	20	650	156	13	2700	421	28
16	25	920	276	11	3000	396	
17	178	760	1623	27	2950	956	
18	153	800	1469	24	2700	778	43
19	87	900	940	59	2650	1876	16
20	25	1200	360	18	2400	518	53
21	30	1450	522	18	2700	583	31
22	157	1400	2638	11	2700	356	15
23	20	920	221	5	2550	153	
24	35	700	294	10	3300	396	
25							
26	27	1125	364	11	2300	304	13
27	27	1150	373	20	2400	576	15
28	64	300	230	19	2300	524	15
29	160	1150	2208	23	2650	731	97
30	440	700	3696	27	2700	875	
31	-	-	-	-	2700	-	
AVE.	206	822	1063	19	2597	599	36

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: November YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	13	920	143	10	3100	372	9
2	41	1075	529	9	2750	297	7
3	15	1375	248	13	2950	460	65
4	57	700	479	23	300	83	
5	34	700	286	17	300	61	
6	11	950	125	13	2700	421	41
7	30	900	324	14	2950	496	42
8	33	1275	505	183	2950	6478	7
9	8	850	82	14	3000	504	13
10	11	900	119	13	2950	460	20
11	11	1100	145	16	2400	461	
12	15	760	137	13	2550	398	
13	15	900	162	13	2550	398	13
14	17	500	102	13	2550	398	12
15	17	600	122	10	2700	324	8
16	33	550	218	11	2750	363	8
17	25	500	150	9	2550	275	13
18	27	1050	340	11	2500	330	
19	193	700	1621	11	2700	356	
20	32	700	269	13	2700	421	18
21	18	925	200	8	2700	259	8
22	8	1175	113	13	2700	421	7
23	Holiday						
24	115	825	1140	13	2700	421	36
25	86	490	506	13	2700	421	
26	20	800	192	17	2550	520	
27	8	700	67	8	2500	240	11
28	92	725	800	12	2550	367	11
29	162	600	1170	12	2550	367	18
30	123	1000	1480	8	2700	259	15
31							
AVE.	44	836	406	18	2536	573	19

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: October YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	8	920	88	10	3100	372	24
2	10	675	81	12	2950	425	16
3	10	575	69	11	3000	363	2
4	18	675	146	12	3300	475	17
5	11	900	110	12	3300	475	15
6	3	850	31	7	3300	277	48
7	3	840	30	13	2950	460	
8	6	840	61	20	3180	763	
9	362	800	3475	26	3000	936	61
10	57	745	510	17	3150	643	44
11	16	750	144	13	3000	468	17
12	18	675	146	13	3100	484	8
13	13	735	147	12	2700	389	7
14	63	1170	855	13	2550	398	
15	44	920	486	11	3000	363	
16	33	760	301	8	3000	288	8
17	14	950	160	8	2950	283	6
18	20	1050	252	15	2750	495	17
19	27	730	237	27	3100	1004	104
20	11	975	118	25	2750	825	65
21	5	920	55	15	3100	558	
22	123	980	1446	17	3100	632	
23	Holiday						
24	15	950	171	11	3000	363	8
25	26	900	280	11	3400	411	11
26	19	900	205	11	3300	399	7
27	11	950	115	13	2700	421	20
28	49	590	347	11	2750	333	
29	23	640	177	15	1950	351	
30	20	1200	312	8	2950	283	21
31	16	900	173	8	2700	259	9
AVE.	35	852	359	14	2970	473	24

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: September YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	163	1175	2298	18	2750	594	13
2	42	1050	529	15	2700	486	
3	83	1050	1046	7	1950	164	
4	Holiday			Holiday			
5	127	1000	1524	11	3000	396	13
6	17	925	189	4	3000	144	5
7	18	925	200	8	2950	283	7
8	53	1025	652	13	2950	460	12
9	No Sample			No Sample			
10	18	750	162	8	3100	298	
11	30	1125	405	12	2700	389	29
12	11	950	125	10	2750	330	11
13	11	1100	145	78	2650	2480	7
14	16	925	178	36	3500	1512	8
15	390	825	3861	13	2950	460	16
16	42	1350	680	17	3100	632	
17	15	1250	225	8	2700	259	
18	215	1225	3160	15	2700	486	25
19	33	800	317	8	2700	259	8
20	18	825	178	11	2950	389	23
21	13	865	141	9	2750	297	11
22	6	875	63	7	2750	231	8
23	5	840	50	7	2050	172	
24	8	920	88	8	2050	197	
25	15	850	153	13	1750	273	37
26	1270	800	12192	33	2700	1069	154
27	180	825	1782	No Sample			92
28	50	850	510	11	3300	436	15
29	48	740	426	8	3300	317	11
30	18	980	212	12	3150	454	
31							
AVE.	104	958	1125	15	2774	499	25

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: August YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	55	920	607	11	2700	356	15
2	23	775	214	15	2700	486	17
3	11	825	109	13	2650	413	17
4	24	700	202	19	2500	570	20
5	18	1100	238	16	3100	595	
6	25	920	276	204	3100	7589	
7	15	250	45	15	2200	396	25
8	13	800	125	11	2400	317	11
9	25	575	173	20	2950	708	27
10	8	600	58	11	3000	396	15
11	8	750	72	35	2650	1113	18
12	15	780	140	58	4300	2993	
13	215	980	2528	8	2200	211	
14	950	600	6840	75	2650	2385	180
15	170	600	1224	11	2750	363	23
16	27	825	267	11	2950	389	15
17	20	650	156	8	2950	283	11
18	15	575	104	15	2950	531	23
19	40	760	365	8	1900	182	
20	86	1170	1207	11	3300	436	
21	80	-	-	13	2550	398	8
22	17	650	133	15	2750	495	48
23	18	750	162	236	2550	7222	151
24	11	1150	152	20	2950	708	92
25	13	875	137	25	3100	930	198
26	18	980	212	42	3400	1714	
27	23	640	177	25	3400	1020	
28	35	790	332	13	3150	491	33
29	37	1000	444	18	2950	637	70
30	25	950	285	70	3000	2520	440
31	147	800	1411	17	3100	632	65
AVE.	71	791	613	34	2865	1209	66

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: JULY YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	15	920	166	18	2950	637	12
2	15	1050	189	18	3100	670	
3	8	650	62	11	2300	304	7
4	Holiday			Holiday			
5	13	590	92	11	2750	363	5
6	25	975	293	11	3100	409	7
7	13	750	117	11	3150	416	5
8	15	920	166	13	2700	421	
9	8	700	67	13	2700	421	
10	8	1200	115	13	2700	421	5
11	18	1150	248	13	3100	484	8
12	11	350	46	17	2650	541	5
13	46	1175	649	17	2650	541	15
14	15	625	113	11	2400	317	5
15	15	1050	189	13	2950	460	
16	15	no flow	-	13	2750	429	
17	11	1050	139	17	2550	520	11
18	23	675	186	15	3100	558	13
19	135	600	972	17	2650	541	5
20	139	1090	1818	15	3100	558	28
21	57	200	137	8	2750	363	13
22	25	1170	351	14	3500	588	
23	65	1050	819	11	3500	462	
24	27	1325	429	11	2750	363	11
25	17	1060	216	18	2700	583	17
26	20	975	234	18	2750	594	17
27	15	1125	203	17	2950	602	15
28	13	1075	168	8	2950	283	17
29	35	700	294	8	3300	317	
30	160	700	1344	17	3550	724	
31	42	625	315	27	3000	972	25
AVE.	34	880	350	14	2940	495	12

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: June YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	5	815	49	11	2550	336	18
2	17	800	163	20	3150	756	23
3	83	No flow	-	46	3100	1711	
4	278	"	-	18	3500	756	
5	102	"	-	17	2700	551	23
6	42	475	239	15	2950	531	53
7	65	1100	858	15	2950	531	86
8	72	525	454	17	3100	632	108
9	34	575	235	25	2900	870	30
10	13	800	125	17	2900	592	
11	11	1600	211	13	3300	515	
12	33	575	228	11	2950	390	7
13	472	1050	5947	50	8500	2100	27
14	147	575	1014	18	3400	734	72
15	18	1000	216	27	2400	778	173
16	17	25	5	17	2400	490	46
17	15	700	126	20	3100	744	
18	53	800	509	11	3300	436	
19	17	3000	612	18	2650	572	8
20	18	5200	1123	13	2300	359	17
21	11	5200	686	11	2500	330	11
22	408	1000	4896	11	2400	317	17
23	1050	950	1970	35	2550	1113	230
24	70	700	588	20	2400	576	
25	-	-	-	13	2400	374	
26	15	800	144	15	2050	369	17
27	13	590	92	13	2650	413	8
28	11	500	66	13	3000	468	11
29	18	500	108	15	3150	567	8
30	17	550	112	11	3400	449	11
31							
AVE.	108	1048	1184	19	2820	645	46

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: MAY YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	20	800	192	37	2550	1132	210
2	25	1260	378	15	2300	414	13
3	20	1050	252	39	2200	1030	193
4	27	1040	337	67	2500	2010	405
5	23	1000	276	42	2300	1159	169
6	23	1450	400	28	2750	924	
7	151	1600	2899	27	2750	891	
8	46	1050	580	25	2650	795	130
9	30	975	351	25	3000	900	130
10	28	725	244	25	2750	825	151
11	25	925	278	15	2700	486	20
12	29	660	230	25	2550	765	78
13	67	840	676	50	3100	1860	
14	44	1050	554	15	2150	387	
15	70	1075	903	92	2400	2649	570
16	39	1150	538	30	2200	792	210
17	30	1025	369	11	2700	356	12
18	53	915	582	15	2500	450	42
19	120	1050	1512	13	2400	374	67
20	53	920	585	11	2700	356	
21	53	1050	668	33	2750	1089	
22	35	940	395	184	2650	5851	1930
23	70	775	651	18	2550	551	115
24	13	775	121	11	2950	425	3
25	30	660	238	11	2750	363	3
26	24	550	158	17	2950	602	7
27	20	920	221	17	3300	673	
28	18	980	212	13	2750	429	
29	13	655	102	18	2700	583	86
30	27	780	253	17	2500	510	13
31	13	875	137	17	2550	520	53
AVE.	40	952	493	31	2631	973	200

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: April YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	20	640	154	18	3100	670	
2	17	640	131	8	2750	264	
3	20	670	161	30	2550	918	165
4	7	740	62	39	2650	1240	315
5	196	675	1588	20	2300	552	86
6	115	800	1104	27	2550	826	135
7	61	850	622	111	2550	3397	244
8	315	50	189	48	2700	1555	
9	25	640	192	27	2950	956	
10	120	580	835	53	2550	1622	390
11	156	700	1310	60	2500	1800	246
12	305	925	3384	89	2750	2937	672
13	127	690	1052	78	2750	2574	86
14	62	700	521	11	2500	330	30
15	35	760	319	15	2700	416	
16	35	700	294	17	3000	612	
17	70	775	651	35	2550	1071	236
18	44	1190	628	37	2550	1132	254
19	25	800	240	65	2550	1989	286
20	11	625	83	17	2700	551	127
21	65	600	468	50	2400	1440	430
22	23	105	29	57	2700	1847	
23	33	700	277	62	3150	2344	
24	280	715	2402	48	2300	1325	100
25	246	1150	3395	25	2150	645	123
26	127	1350	2057	28	2400	806	108
27	48	1400	403	17	2200	224	95
28	25	1400	210	18	2300	248	53
29	20	920	110	13	2700	211	
30	15	920	83	17	2700	275	
31							
AVE.	88	781	766	68	2607	1162	209

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: MARCH YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	70	750	630	460	2750	15180	224
2	150	835	1503	300	2750	9900	65
3	85	790	805	25	2550	765	70
4	39	105	49	23	2950	814	
5	30	840	302	15	2650	477	
6	46	725	400	17	2750	561	30
7	102	1015	1242	15	2650	477	42
8	178	740	1580	35	2750	1155	130
9	570	700	4788	83	2750	2739	780
10	405	950	4617	127	2950	4495	472
11	570	760	5198	102	2700	3304	
12	1120	200	2688	130	2750	4290	
13	550	835	5511	39	2700	1263	120
14	44	740	390	25	2550	765	53
15	135	830	1344	42	2950	1486	150
16	74	855	759	88	2700	2851	420
17	70	935	785	42	2950	1486	166
18	268	1250	4020	39	2700	1263	
19	50	930	558	74	3100	2752	
20	166	800	1593	172	2400	4953	460
21	57	865	591	39	2650	1240	160
22	30	755	271	28	2700	907	86
23	55	1090	719	67	2550	2050	346
24	125	750	1125	23	2650	731	
25	103	800	988	27	2400	777	
26	23	700	193	20	2550	612	
27	28	845	283	15	2200	396	50
28	48	980	493	15	2700	486	46
29	30	825	297	13	2950	460	27
30	20	870	208	20	2550	612	95
31	23	1250	345	15	2400	432	
AVE.	170	817	1428	69	2687	2248	181

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: February YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	60	920	662.4	11	2650	349.8	46
2	25	980	294.0	13	2700	421.2	53
3	33	1050	415.8	8	2750	264.0	39
4	25	980	294.0	15	2650	477.0	42
5	57	1100	752.4	17	2700	440.8	
6	80	840	806.4	11	2500	330.0	
7	65	800	624.0	20	2550	612.0	60
8	37	800	355.2	13	2400	374.4	55
9	46	800	441.6	8	2400	230.4	44
10	198	920	2185.9	11	2650	349.8	44
11	133	920	1468.3	18	2550	550.8	50
12	86	840	866.9	17	2950	601.8	
13	295	700	2478.0	15	2950	531.0	
14	98	800	940.8	13	2700	421.2	37
15	39	760	355.7	13	2700	421.2	46
16	23	840	231.9	15	2950	531.0	44
17	35	840	352.8	15	2950	531.0	42
18	44	800	422.4	27	2750	891.0	42
19	44	840	443.5	17	3000	612.0	
20	25	800	240.0	13	3100	483.6	
21 *	Stream Diverted to Pond						
22	25	800	240.0	15	2750	495.0	53
23	75	800	720.0	15	2550	459.0	53
24	173	350	726.6	18	2950	637.2	86
25	140	700	924.0	17	2650	540.6	40
26	39	540	252.7	44	2950	1557.6	
27	315	1300	4914.0	20	2950	708.0	
28	270	1190	3855.6	130	2750	4290.0	305
29	150	810	1458.0	830	3000	29880.0	95
30							
31							
AVE.	93	851	990.1	49	2754	1718	65

* Flow being diverted through treatment system
West Outfall only flow diverted.

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: January YEAR 1972

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	30	840	302	17	2950	602	
2	30	840	302	23	2950	814	
3	18	760	164	336	2650	10685	25
4	48	760	438	8	2700	259	23
5	20	800	192	20	2960	708	23
6	42	800	403	13	2750	429	23
7	44	920	486	42	3500	1663	86
8*	28	230	77	15	3000	540	
9*	17	270	55	25	2950	885	
10*	27	270	88	420	2950	14868	390
11*	123	350	517	78	3300	3089	28
12*	70	440	370	102	2950	3610	120
13	42	900	454	105	2950	2343	78
14*	32	540	207	71	2750	3717	55
15*	22	490	129	17	2950	602	
16*	46	490	271	550	2950	19470	
17*	89	440	470	83	2500	2490	57
18*	155	440	818	27	2400	778	89
19*	210	490	1235	15	2650	477	67
20	Stream Diverted to Pond			20	2700	648	62
21	213	980	2505	25	2700	810	147
22	252	1170	3257	28	3150	1058	
23	102	1170	1432	305	2950	10797	
24	39	1100	515	1270	2750	41910	325
25	37	1170	520	18	2550	551	48
26	39	1050	491	173	2750	5715	42
27	35	920	386	98	2550	2999	48
28	336	980	3951	13	2750	429	55
29	13	840	131	70	2700	2268	
30	325	920	3588	13	2950	460	
31	35	980	412	13	2700	421	50
AVE.	83	745	806	130	2831	4390	86

* Partially diverted to spill control pond.
West Outfall only flow diverted.

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: December YEAR 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1		230		362	2550	11077	720
2	FLOW DIVERTED TO EXPERIMENTAL			105	2700	3402	1120
3	HOLDING POND ON 1st, 2nd & 3rd			115	2700	3726	1120
4	72			115	3300	4554	
5	108	920	1192	86	3000	3096	
6	83	760	757	67	2750	2211	980
7	27	800	259	15	2700	486	390
8	17	200	21	600	2750	19800	18
9	42	200	101	13	2700	421	46
10	50	200	120	11	2650	350	102
11	327	160	628	18	3000	648	
12	50	105	63	25	2950	885	
13	30	200	72	18	2650	572	130
14	178	200	427	25	2650	795	123
15	193	200	463	67	2650	2131	86
16	33	200	79	42	2700	1361	183
17	70	160	134	27	2650	859	102
18	28	230	77	25	3000	648	
19	18	160	35	17	3100	632	
20	27	1100	356	11	2950	389	44
21	165	840	1663	17	2700	551	50
22	147	800	1411	37	3000	1332	155
23		760					92
24							
25	74			32	2950	1133	
26	83	800	797	78	2950	2761	
27	35	800	336	39	2950	1381	
28	18	800	173	39	2650	1240	25
29	92	800	883	17	2750	561	35
30	48	800	461	38	2550	1163	48
31		840			2950		
AVE.	81	521	458	74	2812	2434	278

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: October YEAR 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	263	920	2959	30	2050	850	105
2	42	1850	932	10	700	84	
3	700*	700*	5880*	25	1750	525	
4	11	540	71	13	1950	304	13
5	23	760	210	11	1500	198	20
6	376	980	4422	17*	1900*	388*	27
7	20	1100	264	13*	2200*	343*	23
8	5	1050	63	11	1950	257	39
9	22	700	185	13	2500	390	
10	23	1170	323	20	2150	516	
11	42	980	494	8	2150	206	17
12	13	1050	164	11	2050	271	15
13	8	980	94	8	2050	197	13
14	13	840	131	11	2150	284	20
15	11	760	100	13	2200	343	30
16	200	490	1529	20	2400	576	
17	72	760	657	15	2550	459	
18	210	800	2016	25	2150	645	44
19	20	800	192	17	2150	439	27
20	39	800	374	23	2150	593	46*
21	20	840	202	17	2300	469	44
22	27	1050	340	20	2400	576	05
23	14	920	155	24	2700	778	
24	13	920	144	18	2700	583	
25	HOLIDAY ******			*****			*****
26	28	920	309	20	2050	492	173*
27	13	920	144	17	2200	419	78
28	127	840	1280	8	2550	245	30
29	18	980	212	15	2150	387	15
30	18	980	212	16	2550	490	
31	28	1170	393	8	2700	259	
AVE.	83	919	815	16	2165	421	41

*Grab Samples

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: September YEAR 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	11	1050	139	11	2200	290	11
2	236	700	1982	15	2300	432	20
3		980		20	2550	612	33
4	11	700	92	9	2500	270	
5	46	980	540	15	2700	486	
6							
7	48	920	530	17	2400	490	35
8	18	920	199	23	2400	662	46
9	18	920	199	13	2300	359	27
10	23	1100	304	18	2050	443	23
11	20	1300	312	21	2400	605	
12	8	1250	120	11	2400	317	
13		1300		13	2300	359	33
14	13	1170	183	18	2400	518	23
15	13	1170	183	13	2050	320	27
16	11	1170	154	13	2200	343	39
17	20	980	235	104	2400	2995	30
18	8	1170	112	75	2700	2430	
19	7	1100	92	11	2500	330	
20	7	1050	88	8	2500	240	25
21	11	1100	145	11	2200	290	23
22	11	920	121	13	2300	359	27
23	11	920	121	11	2050	271	30
24	19	920	210	27	2200	713	13
25	17	1100	224	35	2300	966	
26	5	980	59	7	2400	202	
27	13	840	131	295	1900	6726	20
28	11	760	100	13	2200	343	11
29	53	640	407	15	1850	333	17
30	530	800	5088	50	1900	1140	53
31							
AVE.	44	1032	447	31	2298	822	27

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: August YEAR 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	11	1170	154	11	2950	389	
2	8	1050	101	18	2700	583	11
3	18	980	212	13	2950	460	11
4	13	980	153	11	2950	389	18
5	33	980	398	11	2700	356	23
6	12	980	141	11	2700	356	13
7	11	1170	154	11	3100	409	
8	15	1050	189	18	2700	583	
9	13	980	153	8	2550	245	17
10	10	980	118	11	2700	356	13
11	25	1100	330	18	2750	594	62
12	15	1050	189	11	2700	356	23
13	20	1050	252	18	2550	490	17
14				16	2550	540	
15	15	1050	189	13	2500	390	
16	15	1050	189	15	2400	432	13
17	13	1050	164	15	2400	432	13
18	5	1100	66	8	2650	254	11
19	15	1100	198	11	2400	317	13
20	23	1170	323	20	2500	600	11
21	23			46	2700	1490	
22	25			11	2500	330	
23	20	1170	281	17	2200	449	15
24	15	1100	198	15	2050	369	13
25	13	1170	153	11	2200	290	8
26	11	1170	154	11	2200	290	18
27	149	1170	1967	15	2150	387	20
28	17			14	2400	403	
29	53			11	2550	337	
30	13	1100	172	11	2500	330	8
31	95	980	1117	13	2050	320	13
AVE.	25	1070	296	14	2544	436	16

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

Month: July

Year: 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	35	980	412	11	2550	307	15
2	20	700	168	18	2300	497	33
3	26	840	262	14	2500	420	
4		700			2400		
5	37	760	337	27	2400	778	
6	44	760	401	42	2750	1386	42
7	48	920	530	30	2500	900	35
8	42	980	494	35	2050	861	39
9	39	920	431	44	1850	977	18
10	29	1170	407	33	2400	950	
11	11	980	129	17	2200	449	
12	20	980	235	8	2200	211	15
13	20	980	235	15	2050	369	15
14	15	1170	211	13	2050	320	13
15	17	1100	224	13	2150	335	13
16	17	1050	214	14	2200	370	5
17	53	1050	668	15	2500	450	
18	30	1050	378	5	2200	132	
19	15	1100	198	8	2200	211	11
20	65	920	718	17	2300	469	60
21	11	920	121	11	2400	317	11
22	53	920	585	15	2500	450	18
23	15	920	166	17	2200	449	17
24	17	1100	224	18	2550	551	
25	11	1100	145	8	2500	240	
26	17	980	200	8	2400	230	15
27	15	980	176	18	2700	583	20
28	18	920	199	17	2650	541	13
29	15	1050	189	23	2650	731	23
30	25	1050	315	33	2400	950	11
31	20	1170	281	5	2750	165	
AVE.	27	975	309	18	2369	521	21

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

Month: JUNE

Year: 1971

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	18	800	173	8	2400	230	18
2	17	920	188	11	2300	304	28
3	28	980	329	18	2550	551	30
4	47	1050	592	20	2300	552	28
5	48	1050	605	27	2400	778	
6	27	1300	421	20	2400	576	
7	27	1050	340	8	2550	245	28
8	30	1250	450	15	2550	459	27
9	57	1250	855	15	2500	450	25
10	39	1100	515	13	2300	359	27
11	20	1250	300	17	2200	449	1730
12	23	1250	345	20	2400	576	
13	700	1300	10920	11	2050	271	
14	98	1170	1376	13	1900	296	42
15	112	1250	1680	8	2050	197	35
16	139	1170	1952	11	2400	317	35
17	44	980	517	15	2200	396	30
18	65	980	764	13	2150	335	780
19	15	980	176	8	2400	230	
20	17	980	200	405	2400	12150	
21	15	980	176	550	1900	12540	500
22	18	1050	227	37	2300	1021	62
23	236	840	2379	13	1950	304	27
24	46	920	508	35	2550	1071	17
25	20	920	221	15	2550	459	17
26	52	1170	744	7	2700	227	
27	420	700	3528	8	2400	230	
28	42	980	494	8	2700	259	15
29	17	1100	224	10	2550	300	13
30	30	1050	378	10	2550	300	18
AVE.	82	1029	1052	46	2355	1214	161

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

Month: May

Year: 1971

DAY	West Plant Outfall			East Plant Outfall			10" Drain
	ppm (P ₂ O ₅) (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	57	1300	889	8	2400	230	
2	17	1300	265	13	2550	398	
3	33	1300	515	11	2650	350	17
4	17	1450	296	27	2750	891	30
5	60	1450	1044	15	2500	450	33
6	15	1450	261	15	2500	450	30
7	15	1450	261	23	2150	593	42
8	20	1600	384	11	2200	290	
9							
10	17	1500	306	17	2050	418	37
11	30	1300	468	8	2050	197	37
12	35	980	412	11	1950	257	15
13	27	920	298	11	2400	317	33
14	23	980	270	12	2300	331	30
15		920			2650		
16	60	840	605	11	2300	304	
17	65	840	655	13	2300	359	20
18	23	800	221	13	2200	343	23
19	23	980	270	15	2550	459	20
20	27	800	259	17	2300	469	92
21	44	840	444	18	2400	518	28
22	75	980	882	14	2400	403	
23	17	920	188	13	2500	390	
24	11	1050	139	11	2200	290	37
25	23	920	254	13	2200	343	28
26	18	920	199	17	2150	439	30
27	30	920	331	13	2300	359	60
28	26	920	287	23	2400	662	35
29	83	920	916	57	2750	1881	
30		920			2950		
31	95	800	912	11	2400	317	
AVE.	35	1076	437	16	2380	439	34

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATAMonth: AprilYear: 1971

DAY	West Plant Outfall			East Plant Outfall			10" Drain
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	15	700	126	8	2300	221	17
2	33	980	368	29	2300	300	20
3	17	1100	224	23	2400	552	
4	15	1170	211	15	2400	432	
5	11	1050	139	11	2300	304	17
6	30	1050	378	11	2200	280	20
7	53	1050	668	11	2200	280	20
8	25	1170	351	13	1750	273	23
9	25	1300	390	17	1450	290	18
10	30	1250	450	25	1850	555	
11	11	1300	172	13	1650	257	
12	11	1170	154	15	1500	270	18
13	18	1170	253	17	1500	306	20
14	25	1170	351	13	1650	257	20
15	18	1170	253	650	1350	10530	3050
16	24	1250	360	78	1900	1773	350
17	236	1250	3540	19	2500	570	
18	48	1300	748	11	2200	290	
19	46	1250	690	13	1950	304	30
20	127	1170	1783	7	2050	172	30
21	143	1300	2231	27	1750	567	39
22	23	1250	345	11	2050	271	20
23	36	1300	1342	13	2050	320	95
24	102	1450	1775	17	2050	418	
25	183	1450	3182	62	2400	1785	
26	15	1250	225	8	1950	187	39
27	15	1250	225	8	2300	221	17
28	42	1250	630	13	2050	320	18
29	7	1350	113	8	2400	230	17
30	17	1300	265	13	2050	320	20
AVERAGE	48	1206	732	39	2015	783	180

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

Month: March

Year: 1971

DAY	West Plant Outfall			East Plant Outfall			10" Drain
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	11	1170	154	11	2200	290	15
2	15	1250	225	15	2200	396	20
3	18	1170	253	11	2300	304	18
4	11	1170	154	11	2050	271	15
5	20	1100	264	23	2550	704	33
6	20	1300	312	27	2700	875	
7	13	1170	183	15	2700	486	
8	65	1100	858	13	2400	274	20
9	67	1250	1005	11	2400	317	20
10	37	800	355	13	2300	559	17
11	50	1250	750	160	2500	4800	1230
12	151	1250	2265	27	2550	826	50
13	36	1250	540	25	2550	765	
14	27	1250	405	13	2550	398	
15	11	1170	154	11	2750	363	25
16	39	760	356	11	2650	350	23
17	86	1300	1342	13	2500	390	46
18	42	1250	630	13	2700	421	20
19	44	1250	660	26	2400	749	139
20	43	1050	542	27	2650	859	
21	28	1100	370	18	2650	572	
22	115	1170	1615	15	2400	432	44
23	244	1170	3426	44	2550	1346	70
24	23	1170	323	18	2650	572	20
25	92	980	1082	18	2300	497	53
26	93	1300	1451	28	2550	857	35
27	28	1250	420	17	2650	541	
28	17	1250	255	13	2650	413	
29	23	1250	345	11	2550	337	25
30	11	840	111	13	2200	343	33
31	17	540	110	11	2200	290	27
AVERAGE	48	1138	676	22	2482	661	43

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

Month: February

Year: 1971

DAY	West Plant Outfall			East Plant Outfall			10" Drain
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	62	800	595	15	2200	396	28
2	48	820	472	17	2050	418	35
3	143	800	1373	17	2050	418	25
4	127	800	1219	11	2050	271	15
5	930	800	8928	26	2300	718	80
6	39	1050	491	27	2300	745	
7	20	920	221	17	2050	418	
8	135	800	1296	244	1950	5710	80
9	72	920	795	13	2200	343	23
10	315	920	3478	20	2050	492	135
11	30	840	302	60	2200	1584	500
12	27	800	259	60	2550	1836	75
13	20	920	221	18	2500	541	
14	70	920	773	13	2550	398	
15							
16	30	760	274	8	2400	230	17
17	42	800	403	11	2400	317	33
18	75	920	828	5	2550	153	18
19	178	590	1260	15	2200	396	15
20	42	800	403	14	2400	403	
21	28	700	235	8	2550	245	
22	33	640	253	13	2400	374	18
23	252	920	2782	15	2550	459	18
24	155	1170	2176	11	2550	367	25
25	39	1170	548	11	2400	346	20
26	15	1250	225	11	2550	267	17
27	11	1170	159	11	2550	367	
28	11	1170	154	11	2650	382	
AVERAGE	109	875	1119	26	2339	692	62

J. R. SIMPLOT COMPANY

MINERAL AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

Month: January

Year: 1971

DAY	West Plant Outfall			East Plant Outfall			10" Drain
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	46	1170	646	15	2550	454	
2	13	1450	226	25	2500	750	
3	13	1300	203	15	2700	986	
4	8	1170	112	15	2550	459	35
5	18	1170	253	28	2550	857	160
6	15	1170	211	139	2400	4003	53
7	33	1170	463	33	2400	950	375
8	139	1170	1952	17	2550	520	1080
9	83	1300	1295	210	2950	7434	
10	127	1900	2896	28	3150	1058	
11	70	1350	1134	17	2400	490	112
12	33	1050	416	13	2050	320	20
13	25	1170	351	20	2200	528	147
14	46	920	508	23	2400	662	147
15	240	1170	3370	50	2200	1320	260
16	130	1050	1638	37	2550	1132	
17	165	1170	2317	42	2900	1336	
18	23	800	221	89	2650	2830	650
19	15	800	144	60	2200	1584	420
20	15	920	166	18	2300	497	78
21	11	800	106	62	1950	1451	405
22	16	1050	202	46	2150	1187	295
23	70	1050	882	44	2550	1346	
24	37	1050	466	33	2550	1010	
25	15	1050	189	33	2200	871	235
26	42	1170	590	50	2200	1320	295
27	35	1170	491	15	2050	369	15
28	15	1170	211	15	2200	396	28
29	15	1170	211	28	2200	739	165
30	15	1250	211	35	2400	1008	
31	53	920	585	39	2650	1240	
AVE.	51	1136	731	42	2427	1245	251

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: December

YEAR: 1970

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	53	1300	827	23	2400	662	112
2	60	1050	756	25	2200	607	178
3	169	1050	2129	23	2400	662	120
4	42	980	494	23	2400	662	143
5	18	1300	281	23	2150	593	
6	25	1450	435	35	2200	924	
7	139	1300	2168	440	2200	11616	1270
8	72	1300	1123	15	2400	432	53
9	89	1450	1549	55	2400	1584	336
10	37	1300	577	11	2650	350	25
11	17	1300	265	11	2550	337	13
12				11	2700	356	
13	13	1300	203	11	2500	330	
14	28	1300	437	8	2400	230	18
15	135	1300	2106	11	2200	290	17
16	80	1300	1249	11	2400	317	62
17	295	1450	5133	8	2050	197	15
18	17	1250	255	11	2200	290	27
19	17	1170	239	11	2550	337	
20	15	1300	234	13	2550	398	
21	28	1170	393	13	2400	374	18
22	23	1250	345	8	2400	230	15
23	30	1250	450	35	2550	1071	83
24	23	926	256				
25							
26	124	920	1369	23	3000	828	
27	700	980	8232	18	2550	551	
28	83	920	916	17	2200	449	57
29	80	800	768	17	2550	520	60
30	95	1050	1197	33	2200	871	670
31		1170			2550		33
AVE.	90	1193	1228	34	2411	931	158

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: November

YEAR: 1970

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" DRAIN
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	13	1170	180	20	2550	620	13
2	13	1050	160	8	2750	260	15
3	70	1170	980	8	2700	260	46
4	13	1300	200	15	2650	480	7
5	28	1170	400	13	2950	460	39
6		1300		11	2950	400	
7		1450			2400		
8	17	1450	300	17	2700	560	260
9	80	1300	1260	42	2400	1220	80
10	420	1100	5540	23	2550	700	
11							
12	362	1500	6520	23	2300	640	200
13	108	1250	1620	60	2400	1740	265
14	23	1170	320	20	2500	600	
15	15	1170	220	60	2500	1600	39
16	72	1450	1260	8	2400	240	42
17	13	1650	260	8	2400	240	143
18	260	1450	4520	25	2400	720	15
19	35	1170	500	8	2550	240	35
20	46	1300	720	13	2300	360	
21	5	1300	80	7	2500	220	
22	30	1300	460	13	2550	400	57
23	120	1250	1800	18	2700	580	30
24	115	1250	1720	15	2700	480	8
25	42	1250	640	20	2650	640	
26							
27	25	1250	380	13	2200	340	37
28		1250		15	2500	460	
29	92	1450	1600	17	2200	460	
30	70	1500	1260	23	2500	700	62
AVERAGE	83	1300	1320 ¹²⁹⁰	19	2530	590 ⁵⁷⁷	106

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH: October

YEAR: 1970

DAY	WEST PLANT OUTFALL			EAST PLANT OUTFALL			10" Drain
	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/Day P ₂ O ₅	ppm P ₂ O ₅ (Total)	Gal/Min	lbs/day P ₂ O ₅	ppm P ₂ O ₅ (Total)
1	5	1300	80	15	2400	440	53
2	13	1250	200	13	2500	400	17
3	3	1300	40	7	2550	220	
4	35	1300	540	8	2400	240	
5	62	920	680	7	2200	180	8
6	17	1050	220	13	2550	400	15
7	11	1050	140	17	2550	520	102
8	13	1250	200	35	2500	1060	44
9	169	1300	2640	15	2400	440	11
10	17	1300	260	13	2700	420	
11	13	1300	200	8	2700	260	
12	11	1100	140	8	2550	240	20
13	53	1300	820	37	2400	1060	46
14	13	1250	200	8	2200	220	11
15	48	1300	760	13	2400	380	16
16	17	1250	260	15	2300	420	18
17	7	1350	140	13	2700	420	
18	18	1350	300	17	2700	560	
19	46	1300	720	18	2500	540	33
20	92	1350	1500	15	2650	480	18
21	65	1300	1020	13	2650	420	13
22	44	1300	680	11	2500	340	20
23	83	1170	1160	11	2700	360	7
24	18	1300	280	17	2700	560	
25	8	1450	140	7	1350	120	
26	70	1050	880	13	2700	420	5
27	57	490	340	8	2650	260	17
28	15	1170	220	15	2700	480	17
29	7	1100	100	8	2700	260	20
30	13	1170	180	7	2700	220	108
31	13	1250	200	23	2700	740	
AVERAGE	34	1220	490 ⁴⁹⁸	14	2510	420 ⁴²²	28

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH September YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1450	23		27	2400	15
2	1250	8		11	2300	13
3	1250	600		7	2550	11
4	1450	108		46	2150	13
5	1450	115			2650	17
6	1500	25			2150	8
7						
8	1450	8		72	2200	13
9	1350	17		70	2550	20
10	1350	440		35	2700	35
11	1450	300		2220	2200	18
12	1050	53			2700	83
13	980	135			2400	
14	920	300		17	2400	11
15	920	250		11	2200	370
16	1350	42		23	2500	15
17	1450	17		46	2200	17
18	1350	118		37	2650	67
19	1300	48			3100	18
20	1650	170			2650	7
21	1170	127		15	2700	13
22	1450	108		57	2950	23
23	1450	1200		20	2650	13
24	1450	198		23	2700	17
25	1350	75		35	2750	15
26	1300	20			2700	23
27	1350	23			3100	25
28	1350	23		35	2550	7
29	1250	27		18	2300	13
30	1250	13		65	2400	20
31						
AVERAGE	1320	158		138	2533	33

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH August YEAR 1970

DAY	WEST PLANT EFFLUENT		10" DRAIN		EAST PLANT EFFLUENT	
	Gal/Min	(Total)	Gal/Min	ppm P_2O_5 (Total) ⁵	Gal/Min	ppm P_2O_5 (Total) ⁵
1	1170	42			2400	15
2	1050	62			2700	11
3	1050	18		13	2500	15
4	1100	11		35	2550	13
5	1450	23		13	2400	20
6	1250	48		28	2550	11
7	1300	18		8	3100	13
8	1300	25			2700	8
9	1300	13			2550	11
10	1450	17		13	2550	13
11	1250	67		8	2550	15
12	1500	20		8	2550	17
13	1300	30		8	2950	8
14	1300	20		15	2950	13
15	1350	11			2200	13
16	1500	53			3100	7
17	1300	7		11	2500	16
18	1170	11		183	2550	27
19	1600	27		139	2550	27
20	1300	17		7	2550	7
21	1170	11		5	2500	18
22	1500	15			2950	23
23	1300	95			3100	8
24	1300	169		20	2700	11
25	1450	165		25	2950	20
26	1450	25		78	2400	15
27	700	53		204	2550	23
28	760	35		8	2300	7
29	1450				2050	
30	1600	35			2750	11
31	1500	44		173	2400	30
AVERAGE	1296	40		47	2614	15

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH July YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1300	25		390	2550	75
2	1500	15			2650	30
3	1500	92			2550	17
4	1100				2650	
5	1300	30		135	2400	17
6	1300	25			2400	17
7	1250	17		33	2950	18
8	1300	33		30	3100	13
9	1250	230		27	2750	13
10	1170	210		42	2950	37
11	1350	23			2950	17
12	1350	17			2500	18
13	1300	17		336	2300	13
14	1900	37		13	2300	18
15	1350	57		15	2300	8
16	1350	35		35	2650	15
17	1450	53		13	2650	7
18	1450	57			2550	13
19	1650	39			2700	25
20	1350	120		7	2300	11
21	1350	55		44	2550	27
22	1300	17		11	2650	17
23	1150	50		3	2750	7
24	1350	35		23	2300	7
25	1650	74			2750	13
26	1450	18			2650	8
27	1170	236		17	3000	27
28	1300	83		80	2400	39
29	1170	67		11	2400	23
30	920	39		8	2650	17
31	980	55		7	2500	18
AVERAGE	1287	62		61	2611	20

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH June YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1170	46		78	2300	17
2	1350	65		50	2550	18
3	1450	13		28	2200	13
4	1250	35		13	2750	15
5	1250	55		44	2500	18
6	1450	37			2750	20
7	1170	95			2400	18
8	1250	210		193	2700	65
9	1750	53		3	2700	33
10	1250	39		127	2700	30
11	1450	11		405	2700	70
12	2150	115		3500	2200	236
13	1450	39			3300	53
14	1750	17			2950	86
15	1300	18		37	2500	13
16	1300	44		80	2700	15
17	1170	105		25	2400	13
18	1250	17		17	2200	20
19	1450	35		15	2400	127
20	1500	110			2550	8
21	1450	57			2500	13
22	1600	13		39	2550	17
23	1500	27		30	2950	18
24	1500	25		30	2550	15
25	1500	35		78	2750	27
26	1500	37		420	2300	108
27	1250	18			2750	11
28	1250	46			2750	20
29	1350	50		28	2950	20
30	1450	13		69	2550	30
31						
AVERAGE	1415	46		241	2635	39

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH May YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1600	27		11	2300	13
2	1850	86			2650	17
3	1600	16			2550	13
4	1600	72		7	2650	17
5	1900	11		5	2650	11
6	1350	11		7	2650	8
7	1650	17		11	2550	11
8	1300	204		67	2400	20
9	1350	127			3100	11
10	2150	46			2950	11
11	1050	15		5	2550	7
12	1250	155		18	2550	8
13	1250	80		3	2750	5
14	1250	15		3	2950	5
15	1050	35		13	3000	5
16	1100				2950	
17	1300	44			2550	17
18	1900			8	2750	18
19	1170	60		20	2500	11
20	1450	350		183	2550	37
21	1900	139		20	3300	7
22	1100	83		42	3150	25
23	1170	27			3100	8
24	1170	188			2700	18
25	980	11		30	3000	13
26	1650	18		62	2650	15
27	1650	8			2550	13
28	1450	42		33	2500	7
29						
30	1600	108			2700	15
31	1750	27			3100	15
AVERAGE	1396	72		29	2743	13

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH April YEAR 1970

• DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1450	72		28	1850	17
2	1350	183		28	1850	13
3	1500	86		17	1650	23
4	1450	85			2050	23
5	1500	44			2050	11
6	1350	67		18	1900	13
7	1300	15		20	1950	13
8	1500	11		25	1950	13
9	1500	11		11	2200	8
10	1450	44		11	2200	11
11	1500	35			2400	7
12	1500	3			2050	5
13	1500	20		15	2150	8
14	1350	50		30	2300	11
15	1250	15		11	2200	8
16	1650	15		15	2300	23
17	1500	17		11	2500	15
18	1500	147			2700	17
19	1600	42			3150	8
20	1750	151		60	2950	30
21	1650	33		13	2550	17
22	1650	13		20	2700	8
23	2150	18		18	2050	13
24	2200	25		39	2750	15
25	1650	57			2550	13
26	1600	65			2750	8
27	1750	65		18	2550	8
28	1600	86		48	2750	33
29	1750	44		18	2550	20
30	1600	37		11	2650	8
31						
AVERAGE	1535	52		22	2340	14

J. R. SIMPLOT COMPANY

MINERAL AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH March YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1600	89				13
2	1500	18		325	2650	8
3	1650	11		33	2150	18
4	1650	75		86	1950	23
5	1650	48		25	2050	25
6	1450	78		92	2400	17
7	1500	135			2700	23
8	1350	178			2950	62
9	1450	92		30	2500	18
10	1500	60		13	2500	8
11	1300	8		25	2400	13
12	1450	92		20	2050	18
13	1300	20		55	2650	35
14	1500	13			2950	17
15	1600	143			2650	18
16	1250	500		67	2500	27
17	1500	98		37	2650	30
18	1300	23		15	2500	20
19	1500	173		390	2500	30
20	1350	15		151	2700	17
21	1600	83			2650	15
22	1450				3000	
23	1250	165		37	2650	15
24	1350	600		18	2750	33
25	1300	23		27	2650	7
26	1300	127		42	2750	17
27	1500			20	1900	
28	1350				2550	
29	1600	62			2150	8
30	1350	143		18	2300	13
31	1500	98		11	2150	7
AVERAGE	1448	113		70	2597	20

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH Feburary YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1750				3100	28
2	1600	160		460	2550	105
3	1450	460		135	2550	37
4	1450	67		28	2400	15
5	1600	62		50	2400	23
6	1350	135		143	2650	78
7	1600	92			2550	23
8	1500	102			2550	25
9	1500	86		39	2300	17
10	1300	72		30	2200	18
11	1600	102		102	2300	11
12	1850	50		86	2500	17
13	1650	95		27	2400	15
14	1750	295			2700	15
15	1750	23			3000	17
16	1850	105		75	3000	8
17	1850	72		23	2950	8
18	1500	33		27	2750	17
19	1450	230		950	2700	390
20	1170	80		1230	2700	17
21	1450	147			2300	450
22	1750	75			2650	25
23						
24	1500	204		300	2550	72
25	1600	139		215	2400	46
26	1600	92		35	2050	18
27	1650	53		178	2300	112
28						
29						
30						
31						
AVERAGE	1580	121		218	2558	60

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH January YEAR 1970

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min.	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1						
2	1600	147		55	2950	37
3	1900	252			3100	20
4	1450	650			3100	13
5	1600	230		75	2950	7
6	1500	173		37	2750	17
7	1450	183		120	3400	39
8	1500	150		123	3400	37
9	1650	151		350	3000	67
10	1750	570			3100	102
11	1750	362			3150	30
12	1850	270		13	2950	17
13	1650	72		20	3000	27
14	1650	123		55	3000	20
15	1500	98		57	3100	28
16	1650	105		139	3000	33
17	1500	25			2700	20
18	1500	18			2950	57
19	1450	178		37	2700	18
20	1500	95		18	2750	11
21	1500	98		46	2750	30
22	2150	15		27	2750	11
23	1600	800		570	2700	173
24	1300	23			3100	15
25	1850	17			3000	15
26	1600	200		480	2750	127
27	1750	252		39	2950	17
28	1600	1780		28	2300	13
29	1750	67		130	2700	25
30	1650	198		165	2700	67
31	1750	75			2700	28
AVERAGE	1630	246		123	2915	37

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH December YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1450	169		25	2700	8
2	1450	80		23	2650	11
3	1600	23		7	2400	3
4	1600	27		27	2700	13
5	1450	48		30	2950	17
6	1600	25			2950	13
7	1600	120			2700	3
8	1450	62		35	2950	23
9	1170	78		42	2700	13
10	1450	200		3	2400	7
11	1500	700		105	2500	25
12	1500	39		25	2400	18
13	1450	55			2950	11
14	1600	110			3000	17
15	1600	80		33	2500	17
16	1450	46		53	2700	27
17	1500	55		15	2700	8
18	1600	57		98	2700	33
19	1600	13		44	2950	18
20	1450				3300	15
21	1600				3000	
22	1600	55		39	3100	17
23	1650				2950	
24						
25						
26						
27	1600	17			2400	23
28	1600	13				
29	1650	28		30	3100	20
30	1650	89		390	3100	67
31	1650	1120		70	3300	44
AVERAGE	1540	130		58	2768	20

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH November YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1850	33			2400	57
2	1600	37			2750	123
3	2150	37		102	2500	25
4	1650	336		20	2300	8
5	2400	139		236	2150	50
6	1450	27		260	2400	70
7	1600	102		276	2550	105
8	1600				2950	57
9	1650				2700	28
10	1650	204		210	2400	33
11						
12	1600	173		57	2650	123
13	1600	405		83	2550	25
14	1600	35		169	2300	44
15	1900	780			2550	37
16	1600	65			2750	83
17	1600	23		60	2950	53
18	1750	222		25	2650	5
19	1950	50		35	2650	15
20	1750	147		78	3100	18
21	1250	112		178	3000	53
22	1650	260			2650	25
23	1450	193			2950	
24	1300	260		98	2550	25
25	1600	270		23	3000	8
26	1600	108		13	2550	8
27		165				
28	1500	376		139	2300	8
29	1600	44			2650	
30	1600	165			2650	13
31						
AVERAGE	1660	176		115	2541	42

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH October YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1600	92		7	2950	5
2	1450	860		89	2700	27
3	1450	80		15	2750	44
4	1500	151			2700	28
5	1600	135			2750	30
6	1600	405		20	2550	23
7	1450	27		18	2550	700
8	1750	1120		25	3500	390
9	1450	350		27	2550	15
10	1450	62		151	2200	
11	1750	362			2550	23
12	1750	15			2700	44
13	1450	280		53	2550	35
14	1500	280		62	2400	25
15	1600	280		169	2500	53
16	1450	530		3300	2700	890
17	1500	67		62	2500	3
18	1350	236			2500	39
19	1450	169			2650	127
20	1300	330		135	2400	42
21	1450	860		130	2300	78
22	1450	250		350	2400	86
23	1450	1650		110	2400	30
24	1600	80		46	2300	5
25	1450				2300	
26	1600				2700	
27	1600	500		160	2300	33
28	1300	390		210	2300	53
29	1300	276		700	2200	165
30	1650	376		285	2700	89
31	1600	70		169	2300	46
AVERAGE	1510	354		274	2554	112

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH September YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1						
2	1650	44		50	2700	28
3	1500	35		60	2500	8
4	1650	25		3	2650	3
5	1600			42	2650	
6	1450				2750	
7	1600	1980			2950	13
8	1600	120		57	2700	15
9	1650	65		236	2400	53
10	1450	62		112	2550	28
11	1600	57		3	2550	13
12	1350	127		280	3000	23
13	1600	23			2700	55
14	1600	44			2500	123
15	1600	18		86	2650	188
16	1350	20		95	2650	60
17	1300	27		86	2500	35
18	1300	48		30	2550	18
19	1350	5		28	2750	13
20	1450	25			2550	15
21	1650	72			2700	27
22	1450	210		35	2750	17
23	1350	108		89	2550	37
24	1100	183		55	2650	27
25	1450	300		42	2050	25
26	1350	188		80	2950	3
27	1350	83			2550	15
28	1750	188			2700	3
29	1450	83		151	2200	15
30	1600	18		53	2950	27
31						
AVERAGE	1490	151		80	2631	33

J. R. SIMPLY COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH August YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1650	600		120	2750	53
2	1450				1450	
3	1500	98			3300	8
4	1650	480		15	3000	25
5	1750	151		112	3100	30
6	1600	300		30	3000	13
7	1750	30		20	3400	15
8	1600	28		25	3500	11
9	1170	102			3500	20
10	1500	89			3100	5
11	2400	210		48	2950	17
12	1650	336		102	1850	25
13	1500	20		55	3100	23
14	1500	28		155	3700	53
15	1300	15		80	3150	25
16	1450	1300			3500	28
17	1350	18			3150	25
18	1350	3		244	3150	39
19	1600	1080		165	2950	20
20	1600	25		72	2750	27
21	1850	390		18	3300	15
22	1650	27		198	3400	62
23	1600	39			2700	35
24	1750	62			2550	25
25	1650	89		147	2500	46
26	1900	155		72	3000	27
27	1500	130		42	2500	147
28	1350	270		72	2500	20
29	1850	33		188	2500	46
30	1650	160			2700	46
	1600	92			3400	37
AVERAGE	1600	212		94	3077	32

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH July YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1600	112		35	3700	27
2	1600	67		151	3300	59
3	1650	200		150	3300	30
4	1600	105		102	2650	33
5	1900	60			3100	62
6	1450	105			2950	53
7	1600	50		102	3300	39
8	1750	89		183	3400	35
9	1750	830		75	3700	35
10	1900	1350		105	3500	75
11	1650	160		151	3500	67
12	1850	127			2950	70
13	1750	98			3100	67
14	2400	80		37	3100	55
15	1650	1700		35	2300	33
16	1900	165		37	2750	27
17	1600	42		35	2750	30
18	1750	650		35	3100	46
19	1750	13500			2550	35
20	1650	63			2550	39
21						
22	1600	350		25	2050	35
23	1600	46		27	2300	27
24	1450	75		18	2550	48
25	1450	530		86	2200	23
26	1450	35			2200	13
27	1350	27			2550	11
28	1600	23		5	2700	8
29	1600	295		11	2700	7
30	1600	530		17	2650	8
31	1900	330		8	3100	42
AVERAGE	1680	325		59	2885	38

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH June YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1						
2	1650	13		183	1330	25
3	1500	5		60	2700	13
4	1650	18		155	3100	295
5	1850	20		57	4100	222
6	2050			120	2650	53
7						
8		23				
9	1750	53		18	3300	15
10	1650	115		57	3300	285
11	1600	95		57	4300	60
12	1900	230		18	3100	13
13	1650	83		123	3300	37
14						
15						
16	1650	143		27	3400	3
17	1750	65		27	3300	13
18	1450	151		7	3700	39
19	1170	105		15	2700	42
20	1500	37		78		17
21		28				30
22		198				17
23	1650	183		37	3500	27
24	1650	48		57	3900	33
25	1650				3150	
26	1600	86		55	3800	8
27	1600	37		72	3900	173
28		139				102
29				37		
30	1350	160		7	3550	30
31						
AVERAGE	1630	88		60	3304	67

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH May YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1450	62		33	3300	48
2	1300	62		105	2930	30
3	1170				2700	46
4		80			2700	23
5	1500	39		46	2500	15
6	1900	11		147	3100	42
7	1650	15		13	2950	143
8	1650	5		39	2750	315
9	1650			230	2750	18
10					2950	28
11		15			2700	17
12	1600	39		33	2750	20
13	1850	150		5	2950	260
14	1750	300		70	3500	37
15	1450	37		20	3100	28
16	1450			3	3100	
17					2700	
18		102			2700	20
19	1950	27		39	3150	50
20	1750	35		18	2650	25
21	1600	67		198	2950	25
22	1650	15		188	2550	50
23	1750			80	3100	
24	1900				3300	
25		44			2950	17
26	1950	15		37	2950	3
27	1850	28		8	2650	5
28	1450	550		7	2700	20
29	1750			83	2700	
30						
31	1750	27			3300	33
AVERAGE	1660	77		67	2903	53

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATAMONTH April YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1500	147		5	2950	23
2	1450	147		110	2750	39
3	1500	236		405	2550	86
4	1600	130		23	2700	23
5	1450				2700	27
6	1450	62			2700	17
7	1450	115		65	2700	5
8	1500	155		23	2950	25
9	1600	28		405	2700	44
10	1650	188		230	3100	44
11	1650	89		23	3100	13
12	1650				2550	35
13	1600	42			2950	30
14	1900	276		23	2950	25
15	1500	188		112	2700	39
16	1650	86			2750	48
17	1500	160		252	3100	33
18	1900	57		48	3400	15
19	1650	25			2700	11
20					2400	23
21	1650	139		15	3150	8
22	1750	120		83	3400	18
23	1750	75		98	3000	17
24	1600	105			2950	44
25	1750	120		150	3000	23
26	1250	325			3000	27
27	1450	39			2700	62
28	1350	276		620	3000	92
29	1600	23		180	1750	31
30	1450	2300		44	3100	8
31						
AVERAGE	1580	209		146	2578	32

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH March YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1	1170	20			2400	46
2	1500	25			2950	46
3	1300	270		46	2750	27
4	1450	244		67	3100	27
5	1170	165		65	2550	35
6	1450	170		8	2950	55
7	1300	169			2950	35
8	1600	23			3100	75
9	1450	80		11	2650	57
10	1300	92		46	3000	11
11	1450	27		130	3000	42
12	1300	160		210	2650	7
13	1450	53		112	2700	23
14	1450	33		25	2950	15
15	1450	28			2400	198
16	1350	23			3400	330
17	1450	130		108	2650	230
18	1500	165		210	3100	50
19	1750	102		130	3100	11
20	1600	78		18	2750	20
21	1300	33		65	2700	39
22	1450	11			2700	46
23	1350	5			2300	33
24	1500	130		60	2400	7
25	1450	46		18	2700	18
26	1600	89		1230	2550	420
27	1300	102		150	2650	11
28	1450				2400	
29	1600				2550	
	1450	130			3100	48
	1170	13		135	2700	39
AVERAGE	1380	90		142	2689	69

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH February YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P_2O_5 (Total)	Gal/Min	ppm P_2O_5 (Total)	Gal/Min	ppm P_2O_5 (Total)
1						15
2	1300	50			2400	15
3	1450	105		570	2400	75
4	1170	120		7	3100	160
5	1170	200		11	2050	160
6	1170			23	3100	
7	1300	460		11	3100	350
8	1750	8			3300	35
9	1300	50			2550	530
10	1250	50		236	2500	170
11	1250	48			2150	130
12	1170	160		50	2700	15
13	1050	260		39	3300	23
14	1170	127			3100	30
15	1170	39			3300	25
16	1300	17		20	3300	78
17	1250	60		108	3300	95
18	920	80		110	2750	50
19	980	62		268	2650	42
20						
21	800				2550	
22	920				2550	
23	1300	23		210	2700	42
24	1350	178		236	2700	105
25	1100	98		155	3300	42
26	1250	139		160	3100	42
27	1600	44		500	2400	102
28				280	2550	62
29						
30						
31						
AVERAGE	1220	108		158	2803	98

J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

WASTEWATER DATA

MONTH January YEAR 1969

DAY	WEST PLANT OUTFALL		10" DRAIN		EAST PLANT OUTFALL	
	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)	Gal/Min	ppm P ₂ O ₅ (Total)
1						
2	1600	200		200	4200	8
3	1300			230	2400	
4						
5	1300	39			2700	11
6	1300	1600		48	3100	25
7	1350	180		11	3100	28
8	1450	204		108	3100	55
9	1450	80		13	3100	27
10	1450	147		336	3100	17
11	1600	3150			2700	300
12	1450	180			3100	86
13	1450	95		5	2700	55
14	1350	350		89	2700	33
15	1750	1600		72	2700	62
16	1170	480		80	2400	30
17	2550	28		20	1450	315
18	1450	60			2700	11
19	1450	170			2700	20
20	1750	165		204	2550	20
21	1450	230		65	2400	48
22	1250	150		83	2400	18
23	1250	83		7	2400	15
24				7	2200	8
25	1350	200			2550	37
26	1170	112			2700	15
27	1300	89		390	2200	20
28	1450	155		270	2400	39
29	1450	46		15	2400	60
30	1450	39			2650	27
31	1170	72		98	2700	55
AVERAGE	1400	367		112	2672	51

EFFLUENT DITCHES

(month) (year)

(EAST) (WEST)

	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	SO ₄ ppm
1	7.0	T	39	2650	.6	7.5	.50	28	1450	.3	800
2	6.7	T	112	2750	1.9	6.4	2.2	188	1250	1.4	2125
3	7.1	T	33	3100	.6	2.9	.6	600	1050	3.8	750
4	7.3	T	60	3100	1.12	6.1	10.0	460	980	2.7	600
5	7.0	T	89	3100	1.7	6.0	11.5	420	1300	3.3	950
6	6.8	T	89	3300	1.8	6.8	4.5	135	1300	1.1	200
7	6.5	T	183	2700	3.0	6.4	.3	98	1300	.8	325
8	6.9	T	105	3100	2.0	5.5	.1	420	1350	3.4	575
9	6.6	T	139	3100	2.6	6.2	.3	280	1450	2.4	260
10	6.5	T	95	3300	1.9	6.3	2.5	325	1050	2.1	425
11	4.4	T	57	2700	.9	6.3	1.1	165	1050	1.0	675
12	7.6	T	86	2400	1.2	3.4	.1	600	1050	3.8	700
13	7.3	T	57	2950	1.0	6.0	1.5	188	1170	1.3	500
14	6.7	T	86	2700	1.4	6.3	1.5	135	1450	1.2	700
15	7.7	T	7	3100	.1	6.6	1.5	130	1450	1.1	825
16	7.6	T	37	3100	.7	5.8	21.0	950	1450	8.3	875
17	7.6	T	28	3100	.5	2.1	9.5	3500	1450	30.5	1400
18	7.8	T	15	3100	.3	7.0	.6	198	1300	1.6	900
19	7.6	T	80	3100	4.4	6.6	1.0	183	1300	1.4	925
20	7.9	T	15	3100	.3	4.0	.0	350	1450	2.1	1125
21	7.8	T	15	3100	.3	-	.4	230	1450	2.0	-
22	7.7	T	42	3100	.8	6.0	.6	420	1450	2.7	500
23	7.3	T	25	2950	.5	4.3	.05	178	1450	1.6	500
24											
25											
26	7.2	T	53	2700	.9	3.5	T	550	1450	4.8	290
27	3.5	T	268	2700	4.3	3.5	1.0	570	1450	5.0	625
28	6.4	T	95	2700	1.6	6.6	.5	112	1450	1.0	500
29	3.3	T	480	2700	7.8	7.4	.5	53	1450	.5	675
30	7.8	T	15	2700	.2	6.1	1.0	350	1450	3.1	500
31	2.9		720	2700	11.7	3.5		1270	1450	11.1	Acid from #2 Ammo over flow

at 10' sewer

Reclaim H₂O River

Spills at #1 Ammo

* Samples picked up 12-26-68

3065/1.1 48,709/1.1 13080/2157 38850/1233

Laundries

()

(WPL)

(Rivers)

(F.M.C.)

	SS	%F	%SS	%F	CEB %SS	CE %SS	Port %SS	pH	F	GPM	CE	
1	T		.50		.12	.18	.10	8.3				
2	T		2.20		.10	.30	.15	7.8				
3	T		.60		.10	.13	.10	7.9				
4	T		10.00		.08	.12	.09	7.9				
5	T	28.6	11.50	22.8	.10	.12	.10	7.9				
6	T		4.50		.11	.10	.09	7.9				
7	T		.30									
8	T		.10									
9	T		.30		.11	.16	.09	7.6				
10	T		2.50		.10	.10	.10	7.6				
11	T	38.1	1.10		.10	.12	.10	7.5				
12	T		.12	41.8	.09	.12	.11	7.7				
13	T		1.50		.12	.10	.20	8.0				
14	T		1.50									
15	T		1.50									
16	T		21.00		.11	.11	.08	7.9				
17	T		8.50		.10	.18	.20	7.7				
18	T		.60		.10	.10	.10	6.8				
19	T		1.00	78.5	.10	.10	.10	7.9				
20	T	20.2	0		.11	.10	.09	7.7				
21	T		.4									
22	T		.6									
23*	T		.05		.10	.05	.05	7.8				
24	T		.5	64.6	.20	.20	.20	8.1				
25	T		1.0		.10	.10	.10	8.1				
26	T		.5									
27	T		.5									
28	T		1.0		.10	.10	.10	8.0				
29	T				.10	.10	.10	7.9				

* Sampled on river sub 12-21-68

(EAST)

(WEST)

DATE	1	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	2	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	SO ₄ ppm	
	1	8.1	T	11	2700	.2		7.3	4.0	130	1450	1.1	3250	From Sulfate P/t.
	2	7.9	T	8	3500	.2		6.4	3.0	405	1450	3.5	4000	
	3	7.3	T	23	3100	.4		6.6	2.5	222	1300	1.7	5000	
	4	7.7	T	33	3700	.7		7.0	2.0	350	1250	2.6	5000	
	5	7.9	T	25	3500	.5		7.7	.2	53	1250	.4	8500	
	6	7.7	T	30	3500	.6		6.8	.2	95	1170	.7	7500	
	7	7.6	T	39	3500	.8		4.5	.1	230	1170	1.6	1125	
	8	8.0	T	18	3500	.4		5.5	.6	236	1170	1.6	750	Ammo 2 had a clean out
	9	7.9	T	25 17	3500	.4		7.4	.3	27	1450	.2	1250	
	10			35						127				
	11	7.4	T		2100	.7		6.8	1.0		1250	1.0	875	
	12	7.0	T	108	2100	2.0		7.6	.5	70	1450	.6	500	
	13	7.7	T	11	2100	.2		6.6	3.5	1120	1300	8.7	550	
	14	7.8	T	15	2100	.3		6.5	.30	143	1350	1.2	425	
	15	7.9	T	25	2100	.5		6.4	1.5	204	1450	1.8	775	
	16	8.1	T	11	2100	.2		6.7	4.5	178	1450	1.6	750	
	17	8.0	T	11	3500	.2		6.4	.3	35	1300	.3	825	
	18	7.0	T		2100			6.1	.7		1300		700	
	19	7.9	T	8	2100	.2		8.0	.3	39	1170	.3	425	
	20	7.8	T	28 8	2100	.2		8.5	.6	35	1250	.3	375	
	21	6.8	T	127	2100	2.4		6.4	2.0	169	1170	1.2	500	
	22	3.3	T	330	2100	6.3		2.5	6.0	215	1300	1.7	1425	
	23	7.5	T	8	2550	.1		4.5	8.0	70	1300	.6	600	
	24	7.5	T	30	2650	.5		7.9	.40	44	1300	.3	500	
	25	5.7	T	70	2700	1.1		7.0	4.0	147	1350	1.2	575	
	26	7.4	T	20	2700	.2		3.7	.40	83	1600	.8	925	
	27													
	28	7.4	T	15	2700	.2		6.7	1.6	98	2300	1.4	750	
	29	—		—				6.8	.5		1300		700	
	30	—		—				7.7	.4		1300		600	
	31													

1042/41.7 81.20/15131 *

4505/181 36785/1312 *

SETTLED SOLIDS

Nov

(month)

1968

(year)

(Launders)

(EPL)

(WPL)

(Rivers)

(F.M.C.)

DATE

%SS

%F

%SS

%F

OSB
%SS

CB
%SS

Port
%SS

pH

F

GPM

%SS

F₂₀₅
ppm

1

T

11.6

4.0

15.6

.08

.11

.05

8.3

2.5

2

T

3.0

3

T

2.5

4

T

2.0

.2

.3

.10

8.0

5

T

.17

.1

.2

.10

7.9

6

T

.20

56.1

.1

.05

.02

8.2

2.1

7

T

13.5

.10

.1

.12

.05

8.2

11

8

T

.55

.18

.18

.10

7.7

9

T

3.0

10

11

T

1.5

12

T

.5

.12

.20

.10

8.1

13

T

3.5

.30

.24

.20

8.1

1.8

14

T

14.5

.3

47.7

.12

.12

.10

7.8

13

15

T

1.5

.12

.20

.13

7.9

16

T

1.5

17

T

.3

18

T

.7

.13

.12

.10

7.6

19

T

.27

.20

.18

.10

8.0

20

T

.6

26.9

.20

.19

.10

8.2

4.3

21

T

35.6

2.0

.18

.18

.13

8.2

18

22

T

6.0

.20

.30

.11

7.9

23

T

8.0

24

T

.4

25

T

4.0

.20

.20

.17

8.1

26

T

.4

.20

.16

.10

8.0

27

T

30.8

1.6

22.3

.10

.20

.12

7.9

1.5

0

28

T

.5

29

T

.4

.18

.15

.12

8.1

October '68

East

West

Date	pH	East					pH	West				
		Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD			Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	
1	7.1	Gr	62	3100	1.2		6.4	8.0	244	1050	1.5	
2	7.4		39	3100	.7		3.9	4.0	530	1350	4.3	
3	7.8			3100			6.3	5.0		1170		
4	7.7		33	2950	.6		6.4	2.0	188	1170	1.3	
5	7.2		65	3300	1.3		6.4	3.0	178	1170	1.2	
6	7.3		48	2750	.8		6.7	2.0	147	1450	1.2	
7	7.6		28	1170	.2		3.8	2.0	530	1450	4.6	
8	7.3		37	3100	.7		6.3	6.6	300	1100	2.0	
9	7.7			2700			6.9	2.0		1050		
10	7.6	✓	39	2400	.6		3.7	2.0	500	1450	4.4	
11	7.6	Gr	25	2950	.5		4.1	2.0 2.2	325	1300	2.5	
12	7.0		37	2400	.5		4.3	.3	260	1300	2.6	
13	7.6		48	3100	.9		5.9	.2	270	1350	2.2	
14	7.8		33	3100	.6		6.0	4.5	370	1350	3.0	
15	7.6		33	3100	.6		3.2	.3	370	1350	3.0	
16	7.6		23	3100	.4		7.1	.1	18	1350	.2	
17	7.6		42	3100	.8		5.9	.2	350	1350	2.8	
18	7.6			2950			3.5	.2		1450		
19	8.0			2950			4.2	2.0		1450		
20	7.7		17	2750	.3		6.2	.1	230	1300	1.6	
21	7.9		20	2950	.4		7.1	2.2	112	1250		
22	8.0		17	2700	.3		7.7	7.5	165	1250	1.1	
23	8.0		18	3300	.4		6.7	4.0	183	1300	1.5	
24	8.0		11	3100	.2		6.7	4.5	210	1250	1.5	
25	8.1		15	3100	.3		6.7	3.5	244	1450	2.0	
26	8.0		13	3100	.3		6.7	.2	57	1450		
27	8.0		18	2700	.3		6.0	.6	68	1450		
28	8.0	✓	7	2950	.1		8.4	27.0	70	1300	2.8	
29	8.1	Gr	25	3500	.5		7.5	20.0	260	1170	1.5	
30	7.9		11	3100	.2		8.9	5.0	67	980		
31	8.0		12	3100	.2		8.4	11	100	1000		

Oct 68

42-383

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	7.1	T	62	3100	1.2	6.4	8.0	244	1050	1.5
2	7.4	T	39	3100	.7	3.9	4.0	530	1350	4.1
3	7.8	T		3100		6.3	5.0		1470	
4	7.7	T	33	2950	.6	6.4	2.0	188	1170	1.3
5	7.2	T	65	3200	1.3	6.4	3.0	179	1170	1.2
6	7.3	T	48	2750	.8	6.7	2.0	147	1450	1.2
7	7.6	T	28	1170	.2	3.8	2.0	530	1450	4.1
8	7.3	T	37	3100	.7	6.3	6.6	200	1100	2.0
9	7.7	T		2700		6.9	2.0		1050	
10	7.6	T	39	2400	.6	3.7	2.0	500	1450	4.4
11	7.6	T	25	2950	.5	4.1	.2	325	1300	2.3
12	7.0	T	37	2400	.5	4.3	.3	260	1300	2.1
13	7.6	T	48	3100	.9	5.9	.2	270	1350	2.1
14	7.6	T		3100	.6	6.0	4.5	370	1350	3.0
15	7.6	T	33	3100	.6	3.7	.2	370	1350	3.1
16	7.6	T	23	3100	.4	7.0		18	1250	.2
17		T	42	3100	.8	5.9	.2	350	1350	2.8
18	7.6	T		2950		3.5	.2		1450	
19	8.0	T		2950		4.2	2.0		1450	
20	7.7	T	17	2750	.3	6.2	.1	230	1200	1.8
21	7.9	T	20	2950	.4	7.1	2.2	112	1250	.9
22	8.0	T	17	2700	.3	7.7	7.5	165	1250	1.1
23	8.0	T	18	3200	.4	6.7	4.0	183	1200	1.4
24	8.0	T	11	3100	.2	6.7	4.5	210	1250	1.1
25	8.1	T	15	3100	.3	6.5	2.5	240	1450	2.1
26	8.0	T	13	3100	.3	6.7	.2	57	1450	.5
27	8.0	T	18	2700	.3	(GRAB) 8.0	.6	68	1450	.6
28	8.0	T	7	2950	.1	8.4	27.0	70	1300	.6
29	8.1	T	25	2500	.5	7.5	20.0	260	1170	1.8
30	7.9	T	11	3100	.2	8.9	5.0	67	980	.4
	8.1	T	12	3100	.2	8.1	.1	60	1450	.5

MONTH OF:

September 61

East

West

Date	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
		Vol. %						Vol. %				
1												
2	7.3	Gr	39	3100	.7		6.9	.0V	170	1350	1.4	
3	7.2	"	39	3100	.7		7.2	.0V	98	1300	.8	
4												
5	7.1	.01	44	2750	.7		6.7	Gr	120	1450	1.1	
6	8.0	Gr	20	2400	.3		6.7	"	127	1600	1.2	
7	4.6		35	2950	.6		7.2	"	42	1450	.4	
8	4.0 4.3		89	2550	1.4		7.0	.01	80	1600	.8	
9	7.0		95	3100	1.8		6.9	.02	27	1450	.1	
10	7.6		7	3100	.5		6.6	.02	188	1450	1.6	
11	7.3		36	2700	.6		7.5	Gr	50	1450	.5	
12	7.1	Gr	57	2500	.9		6.9	.01	123	1500	1.1	
13	7.3		18	2950	.3		6.5	.02	130	1500	1.2	
14	7.6		17	2950	.3		6.6	.01	173	1500	1.1	
15	7.3		46	2950	.8		7.4	.02	50	1500		
16	7.8		20	3000	.4		6.0	.01	370 Filtered 550	1500	3.3	
17	3.8		330	2700	5.4		6.0	.04	250	1500	2.3	
18	3.5		330	3100	6.2		6.5	.02	170	1600	1.1	
19	3.7		110	3100	2.1		5.5	.0V	390	1600	3.	
20	3.6		108	3500	2.3		-	-	-	-	-	
21	3.9		60	2950	1.1		7.4	Gr	11	1600	0.	
22	6.6		42	2700	.7		7.8	"	8	1450	.6	
23	7.5	Gr	3	2200	.04		7.9	Gr	20	1300		
24	7.7		13	2300	.5		3.3	Gr	260	1450	2.	
25	7.5		7	2300	.1		6.4	.02	250	1350	2.1	
26	7.6		30	2500	.5		5.2	.02	330	1450	2.5	
27	7.5		18	2950	.3		5.5	.02	420	1600	4.	
28	6.5	.01	108	3300	2.1		no water					
29	7.2	Gr	57	2950	1.0		7.8	Gr	17	1300		
30	7.7	Gr	25	2750	.4		8.0	.01	33	1050		

1803/11 7940/11

Sept-67

42-381

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1										
2										
3	7.3	T	39	3100	.7	6.9	.02	170	1350	1.4
4	7.2	T	39	3100	.7	7.2	.02	98	1300	.8
5	7.1	.01	4-	2750	.7	6.7	T	120	1450	1.1
6	8.0	T	20	2400	.3	6.7	T	127	1600	1.2
7	4.6	T	35	3450	.6	7.2	T	42	1-55	.4
8	4.0 4.3	T	89	2550	1.4	7.0	.01	90	1600	.8
9	7.0	T	95	3100	1.8	6.9	.02	27	1450	.2
10	7.6	T	7	310	.2	6.6	.02	188	145	1.6
11	7.3	T	36	2700	.6	7.5	T	50	145	.4
12	7.1	T	57	2500	.9	6.9	.01	123	1500	1.1
13	7.3	T	18	2950	.3	6.5	.02	130	1500	1.2
14	7.6	T	17	2950	.3	6.6	.01	173	1500	1.6
15	7.3	T	46	2950	.8	7.4	.02	50	1500	.5
16	7.8	T	20	3000	.4	6.0	.05	370 Filter 550	1500	3.3 5.0
17	3.8	T	330	2700	5.4	6.0	.04	250	1500	2.3
18	3.5	T	328	3100	6.2	6.5	.03	170	1600	1.6
19	3.5	T	110	3100	2.1	5.5	.02	390	1600	2.6
20	3.6	T	108	3000	2.3	-	-	-	-	-
21	3.9	T	60	2950	1.1	7.4	T	11 ^{gals}	1500	0.1
22	6.6	T	42	2700	.7	7.8	T	8	1450	.07
23	7.5	T	3	2200	.04	7.9	T	80	1300	.2
24	7.7	T	13	2300	.02	3.3 ^{Amphib}	T	860 ^{1-560 supp}	1450	7.5
25	7.5	T	7	2300	.1	6.5	.02	250	1350	2.0
26	7.6	T	30	2400	.5	5.2	.02	30	1450	2.9
27	7.5	T	18	2950	.3	5.5	.02	420	1600	4.
28	6.5	.01	108	2300	2.1	-	-	700 1150	-	-
29	7.2	T	57	2750	1.0	7.8	T	17	1300	.1
30	7.7	T	25	2750	.4	8.0	.01	33	1050	.2
31			1803/...	7940/				4687/	37650/...	

August 68

East

West

Date	pH	Settled Solids					Settled Solids				
		Vol. %	P ₂ O ₅ ppm	GFM	P ₂ O ₅ TPD		Vol. %	P ₂ O ₅ ppm	GFM	P ₂ O ₅ TPD	
1	7.8	Gr	13	3000	.2		5.6	.01	248	1250	1.5
2	8.0	Gr	5	2700	.1		5.6	.01	350	1300	2.7
3											
4	7.8	Gr	15	2700	.3		3.3	Gr	500	1170	3.5
5	7.9	"	11	3000	.03		4.1	Gr	260	1100	1.7
6	7.8	"	20	2550	.2		5.7	.03	325	1050	2.1
7	7.2	"	27	3000	.5		4.5	.02	330	1170	2.2
8	7.1	"	57	3000	1.03		5.9	.08	236	1050	1.3
9	7.6	"	8	3000	.2		7.3	.04	80	1050	.5
10											
11											
12	6.7	Gr	92	3100	1.7		7.1	.03	115	920	.1
13	6.9	"	62	2700	1.0		7.4	.02	123	920	.2
14	7.3	"	35	2550	.5		8.7	.34	108	1300	.5
15	7.3	"	28	2950	.5		9.0		230	1450	2.2
16	7.0	"	67	3100	1.3		6.9	.12	350	1300	2.7
17											
18											
19	7.3	---	20	2700	.3		2.7	Gr	250	1750	2.2
20	7.5	Gr	28	2700	.5		3.6	Gr	230	1500	2.2
21	7.4	"	53	2500	.8		7.3	.03	180	1500	1.1
22	7.6	"	48	1900	.6		7.4	.3	350	1450	3.2
23	7.6	"	46	2950	.8		7.1	.01	350	1450	3.2
24											
25	7.5	Gr	30	2500	.5		6.8	.02	180	1350	1.2
26	7.3	"	48	2750	.8		8.5	.02	25	1600	.2
27	7.3	"	15	2500	.4		7.8	.03	42	1350	.2
28	6.8	.03	62	2950	1.0		7.5	.02	57	760	.2
29	4.7	.01	155	2550	2.4		6.8	.01	83	1500	.2
30	6.9	Gr	44	2700	.7		6.8	.03	108	1600	1.2
31	7.0	"	15		.1		7.9	.01	71	1450	.2

Aug. 68

42-383

East

West

Date	pH	Settled Solids					pH	Settled Solids				
		Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD			Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	
1	7.8	T	13	2000	.02		5.6	.01	248	1250	1.9	
2	7.1	T	5	2700	.01		5.6	.01	250	1300	2.1	
3			7						180			
4	7.8	T	15	2700	.3		3.3	T	500	1170	2.5	
5	7.9	T	11	3000	.03		4.1	T	260	1100	1.7	
6	7.5	T	20	2550	.2		5.7	.03	325	1050	2.1	
7	7.2	T	27	300	.5		4.5	.02	330	1170	2.3	
8	7.1	T	57	3000	1.03		5.9	.07	236	1050	1.5	
9	7.6	T	8	3000	.2		7.3	.04	80	1050	.5	
10												
11												
12	6.7	T	92	2100	1.7		7.1	.03	115	920	.6	
13	6.9	T	62	2700	1.0		7.4	.02	123	920	.7	
14	7.3	T	35	2550	.5		8.7	.34	108	1300	.8	
15	7.3	T	28	2950	.5		9.0		230	1450	2.0	
16	7.0	T	67	3100	1.2		6.9	.12	2.5	1300	2.1	
17												
18												
19	7.2	-0-	20	2700	.3		2.7	T	250	1750	2.0	
20	7.5	T	28	2700	.5		3.6	T	230	1500	2.1	
21	7.4	T	33	2500	.8		7.3	.03	180	1500	1.1	
22	7.6	T	48	1900	.6		7.4	.3	250	1450	3.1	
23	7.6	T	46	2950	.8		7.1	.01	250	1450	3.1	
24												
25	7.5	T	30	2500	.5		6.8	.02	180	1350	1.5	
26	7.3	T	48	2750	.8		8.5	.03	25	1600	.3	
27	7.3	T	15	2500	.2		7.8	.02	42	1350	.4	
28	6.8	.03	62	2750	1.0		7.5	.02	57	760	.3	
29	4.7	.01	133	2550	2.4		6.8	.01	83	1500	.8	
30	6.9	T	44	2700	.7		6.8	.03	108	1600	1.0	
31	6.0	T	65	3100	1.2		1.9	.01	70	1450	.6	

1
June 68

EFFLUENT DITCHES

East

West

Date	East						West					
	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD		pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	
1	4.2	Gr	83	3100	1.5		7.0	.30	86	1300	.7	
2	7.3		3	2200	<.1		6.4	1.70	169	1600	1.6	
3	7.3		7	2700	.1		3.7	.02	340	1170	2.4	
4	7.3	.01	13	2650	.2		7.7	Gr	7	1300	<.1	
5							2.6	"	39	1450	.3	
6							6.4	"	170	1450	1.3	
7	7.4	.01	17	2950	.3		7.2	.02	62	1600	.6	
8	7.6	Gr	7	2650	.1		6.6	.04	172	1300	1.4	
9	7.4	.01	33	2950	.6		4.9	Gr	268	1500	2.3	
10	7.9	Gr	8	3000	.1		6.6	.04	98	1500	.1	
11	6.7	Gr	123	2700	2.0		2.6	.11	3150	1350	25.1	
12							6.5	.21	135	1460	1.1	
13							7.1	.10	95	1300	.1	
14	8.0	Gr	7	2700	.1		7.2	.12	60	1450	.3	
15	7.9	Gr	11	2650	.2		6.5	.20	143	1450	1.1	
16	7.2	Gr	51	2700	.8		6.3	.05	134	1450	1.2	
17	6.6	.02	72	2750	1.2		6.9	.03	135	1250	1.6	
18	6.7	.02	67	3150	1.3		7.0	.08	102	1350	.1	
19	7.5	Gr	7	3150	.1		7.9	.04	33	1600	.1	
20							7.3	.06				
21	7.4	Gr	17	3150	.3		6.9	.08	160	1450	1.1	
22	7.3	Gr	7	2700	.1		5.1	.06	480	1300	3.1	
23	7.0	Gr	46	2950	.8		6.1	.06	215	1300	1.1	
24	3.5	.03	3760	3400	76.7		6.1	.04	2150	1120	15.1	
25	7.5	Gr	15	2700	.3		2.0	.07	276	1170	1.3	
26	7.0		44	2700	.7		2.7	.04	200	1170	1.1	
27	6.8		65	2700	1.1		6.6	.28	20	1170	.1	
28	7.7		18	2700	.3		3.3	.16	60	1100	.1	
29	7.3		20	2700	.3		3.9	.01	305	1450	2.1	
30	7.4		11	2700	.2		5.1	.01	236	1150	1.6	
31	7.1		42	2150	.2		4.0	.02	210	1170	1.1	

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	4.2	Tr	82	2110	1.5	7.0	.30	86	1307	.7
2	7.3		3	2700	<.1	6.1	1.70	169	1445	1.6
3	7.3			2700	.1	5.7	.02	340	1720	2.0
4	7.3		12	2600	.2	7.2	.70	7	1300	<.1
5			—			7.6		39	1400	.3
6						6.1		170	1200	1.5
7	7.1	.01	17	2900	.3	7.2	.02	62	1400	.6
8	7.6	Tr	7	2450	.1	6.6	.04	172	1300	1.0
9	7.7	.01	30	2900	.6	4.9	.01	24	1400	2.4
10	7.7		8	3000	.1	6.2		98	1400	.7
11	6.7		123	2700	2.0	2.6	.11	3450	1300	25.2
12			—	Wow!!!			.21	135	1400	1.2
13			—			7.1	.10	95	1300	.7
14			7	2400	.1	7.2	.12	60	1400	.3
15	7.1		11	2400	.2			143		1.2
16			51		.2			137		1.2
17	6.2		72	2400	1.2			135	1200	1
18	6.7			2400	1.3	7.3		72	1300	.8
19	7.5	T	7	2400	.1	7.9	.04	33	1600	.3
20						7.3	.06			
21	7.4	T	1	2150	.3	6.9	.08		1450	1.7
22	7.3	T		2700	.1	5.1	.06		1300	2.7
23	7.0	T	46	2950	.8	6.1	.06	215	1300	1.7
24	3.5	.03	3760	3400	76.7	6.1	.04	2150	1170	15.1
25	7.5	T	15	2700	.3	2.0	.07	276	1170	1.9
26	7.0	T	44	2700	.7	2.7	.04	200	1170	1.4
27	6.8	T	65	2700	1.1	6.6	.28	20	1170	.1
28	7.7	T	18	2700	.3	3.3	.16	60	1100	.4
29	7.3	T	20	2700	.3	3.9	.01	305	1450	2.7
30	7.4	T	11	2700	.2	5.1	.01	236	1150	1.6
31	7.1	T	49	2600	.8	6.0	.07	710	1170	1.5

EFFLUENT DITCHES

June 62

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1										
2	7.4	Tr	23	2700	.4	6.7	.35	130	1600	1.
3	7.7	.	3	2700	<.1	6.8	.05	178	1170	1.
4	7.0	.07	70	2500	1.0	6.2	.50	376	1170	2.
5	7.9	Tr	8	2400	.1	3.1	.11	188	1450	1.
6	7.6		20	2700	.3	3.8	.08	222	1450	1.
7	7.9		15	2950	.3	5.5	.04	295	1600	2.
8	7.8		23	3100	.4	5.5	.15	295	1600	2.
9	7.4		23	2950	.4	6.5	1.3	143	1500	1.
10	7.8		15	2650	.2	8.8	2.8	13	1600	.
11	7.8		20	2200	.3	9.0	8.0	23	1600	.
12	7.8		28	2300	.4	6.5	1.3	236	1500	2.
13	7.6		27	2300	.4	4.4	.02	301	1500	2.
14	7.7		20	2550	.3	4.6	.01	193	1600	1.
15	7.5		35	2550	.5	7.3	.02	33	1600	.
16	7.9		15	2650	.2	7.4	.05	105	1450	.
17	7.9		20	2650	.3	7.4	.30	67	1450	.
18	7.9		27	2650	.4	6.5	.20	151	1450	1.
19	7.5		7	3000	.1	7.2	.10	151	1450	1.
20	7.7	V	15	2400	.2	7.2	Tr	23	1450	.
21	8.0	PR	20	2700	.3	5.7	.50	330	1600	3.
22	7.9		23	2700	.4	6.9	.75	151	1600	1.
23	7.8		16	2300	.2	6.9	.06	78	1450	.
24	7.6		17	2950	.3	4.4	.30	530	1450	4.
25	7.7		27	2950	.5	7.3	.50	89	1450	.
26	7.3	V	25	2950	.4	7.0	.11	53	1450	.
27	7.3	.02	50	2950	.9	6.4	.11	80	1450	.
28	4.2	.01	25	3500	1.6	7.8	.50	42	1450	.
29	4.0	.01	115	3300	2.3	-	-	-	-	-
30	3.9	Tr	105	2950	1.8	6.6	.04	27	1300	.
31										

884/30.5 7150/2000

4507/1001 41390/1000

June

East

West

Date	pH	Settled Solids					pH	Settled Solids				
		Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD			Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	
1												
2		7.4	7.1	2.3	2900	.4	6.7	.25	1.2	11000	1.2	
3		7.7		2.2	2900	<.1	6.7			11000	1.2	
4		7.0		2.2	2900	1.0	6.2			11000	1.2	
5		7.9	7.1	2.4	2900	.1	6.1	.11		11000	1.2	
6		7.6		2.4	2900	.3	6.1	.12		11000	1.2	
7		7.9		15	2900	.3	6.1	.11		11000	2.8	
8		7.8		2.3	3100	.4		.15			2.8	
9		7.4		2.2	2900	.4		.13			1.3	
10		7.8		2.2	2900	.2		.22			.1	
11		7.8		2.0	2900	.3			23		.2	
12		7.5	Tr	2.8	2900	.4			23		2.1	
13		7.6	"	2.2	2300	.4	4.4	.12		1500	2.1	
14		7.7	"	2.0	2500	.3	4.6	.04		1600	1.5	
15		7.5	"	3.5	2500	.5	2.3	.02		1600	.3	
16		7.9	"	15	2600	.2	7.4	.05	105	1400	.7	
17		7.9	"	2.0	2600	.3	7.4	.30	67	1400	.6	
18		7.9	"	2.7	2600	.4	6.5	.20	151	1400	1.3	
19		7.7		2	2600	.1		.10	151	1400	1.3	
20		7.7		15	2600	.2		Tr	23	1400	.2	
21		8.0		2.1	2700	.3	5.7	.12		1400	3.2	
22		7.9		2.2	2700	.4	6.8	.12			1.4	
23		7.8		2.2	2700	.2	6.7	.12		1400	.1	
24		7.6		2.2	2700						.4	
25		7.9		2.2	2700	.5	7.3	.20				
26		7.3		2.2	2700	.4	7.0	.10			.5	
27		7.3	.02	50		.9	6.4	.11	50		.7	
28		7.2	.01	75	3500	1.6	7.8	.02	42	1400	.4	
29		4.0	.01	115	3200	2.3						
30		3.9	Tr	102	2900	1.8	6.6	.04	27	1300	.2	
31	A.								121	1400	1.1	

EFFLUENT DITCHES

May 60

East

West

Date	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
		Vol. %						Vol. %				
1	7.7	Tr.		8	2200	.1	5.7	.15		350	1600	3.
2	7.8	Tr.		10	2150	.1	7.0	.08		80	1850	.
3							3.7	.10		330	1600	5.
4							6.8	.40		110	1600	1.
5	7.7	Tr.		15	2150	.2	6.1	.20		183	1600	1.
6	7.8	Tr.		5	2200	.1	6.4	.30		173	1450	1.
7	7.9	Tr.		7	2200	.1	6.7	2.60		376	1600	3.
8	7.8	Tr.		7	2050	.1	4.1	.02		376	1600	3.
9	8.0	Tr.		8	2050	.1	3.7	.03		460	1600	4.
10	7.7	Tr.		13	2550	.2	5.2	.06		280	1500	2.
11	8.1	Tr.		8	2550	.1	6.4	.07		115	1750	1.
12	7.8	Tr.		35	2650	.6	6.7	.10		83	1600	.
13	7.8	Tr.		35	2400	.5	3.4	.02		930	1450	8.
14	7.6			15	2400	.2	4.2	.01		720	1500	6.
15	7.5			23	2200	.3	5.7	3.0		650	1600	6.
16	7.9			3	2150	.1	4.0	.01		350	1500	3.
17	5.0			50	3100	.9	6.6	.02		110	1450	1.
18	3.8			139	2950	2.5						
19	5.8			37	2400	.5	7.8	.07		46	1600	.
20	7.6			8	2300	.1	4.3	.01		480	1750	5.
21	7.9			25	2500	.4	6.2	.21		670	1450	5.
22	7.7	Tr.		17	2500	.2	4.0	.14		950	1450	8.
23	8.0			9	2500	.1	2.7	.15		330	1450	4.
24	8.0			3	3300	1.1	7.2	.02		80	1600	.
25												
26	7.4	Tr.		15	2400	.2	7.2	.15		95	1450	.
27	8.1	"		13	2400	.2	5.1	.60		550	1170	3.
28	8.1	"		7	2550	.1	6.2	.40		252	1600	2.
29												
30	7.9	Tr.		15	2950	3	2.3	.10		1470	1900	16.
31	7.0	"		35	2500	1	2.1	.1		100	1450	1

E a s t'

W e s t

Date	pH	Settled Solids Vol. %	P ₂₀₅ ppm	GPM	P ₂₀₅ TPD	pH	Settled Solids Vol. %	P ₂₀₅ ppm	GPM	P ₂₀₅ TPD
1	7.5	71	8		.1	7.7		350		3.4
2	7.5		10		.1			80		.9
3						7.7		80		5.1
4							10			1.1
5	7.5	71	45		.2	7.1				1.8
6			5		.1	7.1		173		1.2
7	7.7		7		.1	6.7		20		3.6
8	7.7		7		<.1	7.1		322		3.3
9	7.7		8		.1	7.7		450		4.4
10			10		.2					2.5
11	7.7				.1	7.1				1.2
12	7.7									.8
13			35	40				930		8.1
14	7.6									
15	7.6		22		.3					6.2
16	7.9				<.1			250	150	3.1
17	5.0		80		.1			710	17.0	1.0
18	3.8		109	290	.00					
19	5.0		27	200	.5		77	45		.4
20					.1	7.8		20		
21			25			7.0		620		
22	7.7		17		.2	7.1		900		8.2
23	7.5		9		.1			250		4.6
24	7.5		3		<.1					1.5
25										
26			15		.2					
27	7.5		13		.2			500		3.1
28	7.5		7		.1	7.2		252		2.4
29										
30	7.5		15	200	.3	7.3		1470	100	16.7
31						7.5		80		1.0

Month of: April 68

East

West

Date	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
		Vol. %						Vol. %				
1	8.0	Tr.		3	2700	<.1	6.5	.21		143	1900	1.6
2	8.0			15	2300	.2	7.0	.15		188	1750	2.0
3	7.9			15	2300	.2	6.6	.15		139	1750	1.5
4	8.0			13	2700	.2	4.3	.02		376	1600	3.6
5	7.2			18	2550	.3	3.2	.25		830	1600	8.0
6	7.9			20	2550	.3	6.5	.45		270	1600	2.6
7	7.5			7	2700	.1	6.4	.15		147	1750	1.5
8	7.8			11	2400	.2	6.8	.35		120	1750	1.2
9	8.1			4	1900	<.1	5.4	.25		390	1600	3.5
10	7.6			28	2050	.3	6.3	1.6		252	1750	2.6
11	7.9			15	1450	.1	5.3	.55		530	1750	5.6
12	8.3			11	2050	.1	6.6	.40		200	1600	1.9
13							7.5	.20		150	1600	1.4
14	8.0			5	1900	<.1	7.4	.80		60	1750	.6
15	8.0	✓		14	2050	.2	9.7	3.5		360	1750	3.5
16	8.1			7	1900	<.1	6.2	.15		112	1750	1.2
17	6.1			55	2400	.8	7.2	.30		72	1900	.
18	4.0			210	1600	2.0	6.7	.03		75	1600	.
19	7.9			13	2550	.2	3.9	.02		460	1450	4.0
20	7.1			35	2550	.5	4.1	.01		280	1600	2.5
21	7.3			17	1750	.2	4.0	.02		390	1750	4.1
22	7.9			17	2500	.3	4.7	.08		376	1500	3.4
23	7.8			11	2150	.1	4.3	.02		750	2150	9.5
24	7.8			17	2150	.2	4.5	.02		405	1500	3.0
25	7.5			25	2300	.4	6.0	.11		270	1500	2.0
26	.					.	6.4	.55		280	1600	2.
27	.					.	6.1	.17		300	1600	2.
28	7.9			11	2300	.2	5.5	.10		440	1600	4.5
29	7.2			3	2050	<.1	5.9	.02		178	1750	1.5
30	7.7	✓		11	2300	.2	5.9	.02		376	1850	4.
31	7.2			2	2050	.2	5.9	.02		376	1850	4.

March, 1968

East

West

Date	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
		Vol. %						Vol. %				
1	7.3	-		13	2700	.2	5.2	-		520	1450	5.0
2	7.8	-		23	2550	.4	3.2	-		170	1450	1.5
3	7.6	.01		37	2300	.5	7.1	.02		75	1500	.7
4	8.1	Tr.		7	2300	.1	3.5	.13		570	1500	5.1
5	7.2	Tr.		27	2150	.3	7.5	.31		118	1500	1.1
6	7.4			30	2650	.5	4.3	.06		500	1450	4.3
7	6.8			50	2400	.7	6.8	.05		230	1600	2.2
8	4.1			135	2400	1.9	5.8	.01		180	1450	1.6
9	7.9			7	2550	.1	3.6	.45		336	1450	2.9
10	8.0			3	2550	< .1	3.3	.02		600	1450	5.2
11	8.0			8	2500	.1	6.0	.35		276	1600	2.6
12	8.0			11	2500	.2	3.0	.02		860	1100	5.7
13	7.8			18	2500	.2	4.8	.10		500	1170	3.5
14	7.9			13	2400	.2	3.3	.01		560	1170	3.9
15	8.2			11	2550	.2	-	-		-	-	-
16	3.8			108	2550	1.6	-	-		-	-	-
17	7.6			13	2650	.2	6.7	.07		460	1350	3.7
18	6.4			50	3000	.9	3.7	.01		155	1450	1.4
19	4.2			102	2650	1.6	3.2	.01		700	1450	6.3
20	7.7			18	2200	.2	7.5	.11		27	1500	.2
21	7.8			13	2700	.2	6.7	.10		173	1450	1.9
22	7.5			28	2550	.4	6.2	.20		188	1650	1.9
23	7.9			46	2400	.7	7.3	.70		180	1900	2.0
24	7.9			17	2700	.3	2.3	.11		140	1750	1.9
25	7.7			27	2500	.4	5.8	.20		252	1600	2.7
26	7.9			17	2500	.3	3.2	.01		336	1450	2.9
27	8.1			5	2500	.1	7.1	.20		39	1450	.
28	8.2			15	2400	.2	7.8	.01		65	1450	.
29	8.2			8	2550	.1	6.5	.36		330	1600	3.
30	8.1			8	2550	.1	6.9	.11		80	1450	.
31	8.1			12	2100	.2	6.9	.30		204	1850	2.

March

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	7.3	—	13	2200	.2	5.2	—	570	1450	5.0
2	7.2	—	23	1250	.4	5.2	—	170	—	1.5
3	7.2	—	37	—	.5	7.1	—	25	—	.7
4	7.2	—	7	—	.1	—	—	570	—	5.1
5	7.2	—	27	—	.3	—	—	112	—	1.1
6	7.4	—	30	—	.5	—	—	500	10	4.3
7	6.8	—	—	—	.7	—	—	—	—	2.4
8	7.1	—	135	—	1.9	6.1	—	1.1	—	1.6
9	7.2	—	7	—	.1	—	—	570	—	2.2
10	7.2	—	3	—	5.1	—	—	—	—	5.1
11	7.2	—	6	—	.1	—	—	—	—	2.6
12	7.2	—	7	—	.2	—	—	60	—	3.7
13	7.2	—	18	—	.2	—	—	—	—	3.1
14	7.2	—	13	—	.2	—	—	180	—	—
15	7.2	—	11	—	.2	—	—	—	—	—
16	7.2	—	100	—	1.6	—	—	—	—	—
17	7.2	—	13	—	.2	7.1	—	—	—	3.1
18	7.2	—	—	—	.9	7.1	—	—	—	1.6
19	7.2	—	—	—	1.6	—	—	10	—	6.1
20	7.2	—	—	20	.2	7.2	—	20	—	.2
21	7.2	—	13	—	.2	7.2	—	173	—	1.5
22	7.2	—	—	—	.1	—	—	—	—	1.9
23	7.2	—	46	—	.2	7.2	—	100	—	2.1
24	7.2	—	17	—	.2	6.1	—	140	—	1.5
25	7.2	—	29	—	.4	—	—	252	—	2.1
26	7.9	—	17	—	.5	3.2	—	27	1.5	2.9
27	8.1	—	5	—	.1	7.1	—	20	—	.3
28	6.2	—	15	—	.2	7.1	—	—	—	.6
29	8.2	—	18	—	.1	—	—	—	—	3.2
30	8.1	—	8	—	.1	—	—	—	—	.7
31	7.4	—	28	2200	.8	5.2	—	506	1470	2.1

42-383

East

West

Date	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids		P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
		Vol. %						Vol. %				
1	3.4	Tr.		160	1900	1.8	6.3	.75		350	1600	3.4
2	7.4	Tr.		65	2550	1.0	7.0	.50		127	1750	1.3
3	7.0	Tr.		55	2050	.7	7.0	.53		155	1600	1.5
4	7.1	Tr.		55	2650	.9	7.8	.11		110	1600	1.1
5	7.1	.04		50	2300	.7	6.6	.50		302	1600	2.9
6	7.3	Tr.		42	2300	.6	6.6	.75		325	1600	3.1
7	7.5	Tr.		33	2200	.4	6.0	.80		405	1750	4.2
8	7.5	Tr.		30	2400	.4	3.7	.10		500	1750	5.2
9	3.8			115	2700	1.9	7.3	1.0		139	1750	1.5
10	3.2			150	2550	2.3	7.2	.16		130	1450	1.1
11	6.8			11	2150	.1	7.8	.16		38	1600	.4
12	4.0			89	2650	1.4	7.4	.16		104	1500	.9
13	7.5			15	2400	.2	6.9	.68		222	1600	2.1
14	7.8			28	2200	.4	6.1	.42		362	1350	2.9
15	7.5			25	2200	.3	5.6	.63		650	1450	5.7
16	7.9			30	2700	.5	5.8	.75		151	1300	1.2
17	7.7			11	2550	.2	6.4	.20		67	1750	.7
18	7.8			10	1950	.1	6.9	.40		155	1450	1.4
19	8.0			20	2150	.3	5.5	.03		362	1750	3.8
20	7.9			30	2050	.4	2.8	.07		1050	1500	9.4
21	8.1			28	2200	.4	3.5	.09		440	1500	3.9
22	8.2			15	2150	.2	6.6	.24		350	1850	3.9
23	7.7			35	2700	.6				570	1600	5.4
24	7.8			35	2550	.5				155	1600	1.5
25	7.6			30	2300	.4	6.1	.30		460	1450	4.0
26	6.6			46	2400	.7	4.0	.02		460	1500	4.1
27	7.5			27	2400	.4	3.4	.01		620	1500	5.6
28	7.4			37	2200	.5	6.0	.08		130	1500	1.2
29	7.6	✓		27	2650	.4	4.0	.05		470	1050	3.0
30												
31												

1304/45 166150/

9359/222 45850/

W e s t

[illegible]

7.5 N East 2420 .6 59 .49 West 471

Date	pH	Settled					Settled				
		Solids	P ₂ O ₅	GPM	TPD		Solids	P ₂ O ₅	GPM	TPD	
		Vol. %	ppm				Vol. %	ppm			
1	6.0	.24	183	2600	2.9		1.5	1600	1700	17.2	
2	7.2	7.1	15	2700	1.2		1.5	1120	1.5	11.1	
3	7.0		3	26	<.1			110		1.1	
4	8.1	7.1	13	2550	1.4		1.1	870	170	4.1	
5	8.0	7.1	0	2550	0		1.4	370	220	3.9	
6	7.6	7.1	0	27	0		1.2	0		5.8	
7	7.6		13	2500	1.2		1.5	230	1700	3.1	
8	7.7	7.1	20	2400	1.3		1.2	300	1400	3.2	
9	7.8	7.1	25	2500	1.4		1.5	240	1600	6.1	
10	7.5	7.1	25	180	1.3		1.2	620	1500	5.4	
11	8.0	7.1	0	2300	1.2		1.2		1200	2.9	
12	7.6	7.1	0	2500	0		1.5	120	1700	9.1	
13	7.2	7.1		2550	0		1.1	0	1700		
14	7.1	7.1	1.1	2500	1.2		1.1	100	1400	8.1	
15	7.0	7.1	7	230	1.1		1.1	270	1200	3.6	
16	7.2	7.1	7	2700	1.1		1.1	400	1200	4.9	
17	7.0	7.1	5	200	<.1		1.0	1110	200	4.1	
18	7.0		11	2300	1.2		1.0	280	1700	2.5	
19	7.9	7.1	7	2400	1.1		1.0	200	1750	4.1	
20	6.4	7.1	50	240	1.4		1.0	300	1450	11.1	
21	7.1	7.1	78		1.2		1.0		200	11.1	
22	7.1	7.1	100	2700	1.1		1.0				
23	6.6	7.1	179	2000	2.1		1.0	350	1400	3.1	
24	6.3	7.1	160	2300	2.2		1.0	300	1200	5.8	
25	6.9	7.1	60	2200	1.8		1.0	240	1100	2.4	
26	7.7	7.1	230		3.7		1.0	200	1200	3.4	
27	7.5	7.1	22	1100	1.3		1.0	110	1200	1.2	
28	7.4	7.1	23	2200	1.4		1.0	230	1200	2.1	
29	7.4	7.1	30	2200	1.5		1.0	210	1000	1.9	
30	7.5	7.1	33	2600	1.5		1.0	300			
31	7.5	7.1	22		1.1		1.0	200	1200	1.1	

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Nov - 1967

Nitrogen 100290
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October, 1967

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	8.1	Tr.	13	2400	.2					
2	7.9	Tr.	15	2050	.2					
3	7.5	.1	16	2550	.2					
4	7.8	Tr.	7	2550	.1					
5	7.7	.1	7	2400	.1					
6										
7	(pump out of order)									
8										
9										
10										
11										
12						7.5	.45	370	1750	3.9
13										
14						7.9	.6	650	1900	7.4
15						6.1	.35	735	1750	7.7
16						6.3	1.3	1270	1600	12.2
17						5.4	.02	570	1350	4.6
18						7.4	1.4	600	1350	4.9
19						6.8	.5	340	1750	3.6
20						6.8	.45	420	1900	4.8
21										
22						6.6	.85	800	1500	7.2
23						5.8	.9	1470	1600	14.1
24						3.8	.06	830	1350	6.5
25						4.5	Tr.	420	1100	2.8
26						3.7	.5	18000	1450	15.6
27										
28										
29						3.2	.5	1830	1450	15.9
30						5.8	.6	550	1450	4.8
31	7.7	Tr.	15	2300	.2	3.9	.5	1650	1050	10.1

East

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OCT

1500

Date	pH	Settled				P ₂ O ₅ TPD	pH	Settled				P ₂ O ₅ TPD
		Vol. %	P ₂ O ₅ ppm	GPM				Vol. %	P ₂ O ₅ ppm	GPM		
1	8.1	Tr	13	2400	.2		Do not report					
2	7.7	Tr	15	2350	.2		6.2	1.0	370	1300		
3	7.5	.1	16	2510	.2		6.5	.5	420	1750		
4	7.8	Tr	7	2550	.1		4.0	.1		1600		
5	7.7	.1	7	2400	.1		4.7	.45	102	1500		
6							4.2	.15		1200		
7							(Pump out of order)					
8												
9												
10												
11							Pump 15 min					
12							7.5	.5	370	1750	3.9	
13												
14							7.0		630	1700	2.9	
15							7.1	.5	550	1700	7.7	
16							6.3	1.3	1270		12.2	
17									570		4.6	
18								1.1	600	1350	4.7	
19									340		3.6	
20							6.2		420		4.8	
21												
22								.85	510			
23								.9	1470		14.1	
24								.06	230		6.2	
25								Tr	420		2.2	
26								.5	1200	1100	15.6	
27												
28												
29								.5	1230	1400	15.2	
30		Pump Back	201					.6	550	1400	4.8	
31		Tr	15	2500	.2			.5	1650	1200	10.2	

EFFLUENT DITCHES

oct 1967

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	8.1	T		2400						
2	7.5	T		2050		6.2	10.0		1300	
3	7.5	I		2550		6.5	5.0		1750	✓
4	7.8	-		2550	7.4	4.0	1.0	11.2	1600	✓
5	7.7	I		2400		7.7	4.5		1500	✓
6						7.2	1.5		1750	✓
7										
8										
9	7.8	-0-		2050		2.8	.4		1750	✓
10	7.9	-0-		2050		4.0	.5	12.1	1750	✓
11	7.3	I		2550	10.2	2.8	.2		1750	✓
12	7.9	T		3200		7.5	4.5		1750	Comp
13	7.9	T		1600						
14						7.9	6.0		1900	✓
15						6.1	3.5		1750	✓
16	7.8	T		2050		6.3	13.0		1600	✓
17	8.0	T		2200	✓	5.4	.2	62.5	1350	✓
18	4.0	T		2050	✓	7.4	14.0		1350	✓
19	7.5	T		1900	18.1	6.8	5.0		1750	✓
20	7.8	T		2300		6.8	4.5		1900	✓
21						6.60	6.0		1750	✓
22						6.64	8.5		1500	✓
23	7.9	T		2300		5.85	9.0		1600	✓
24	8.0	T		2300		3.83	.65		1350	✓
25	7.84	T		2300		4.50	.05	90.4	1100	✓
26	8.0	T		2400	6.9	3.70	5.0		1450	
27	7.75	T		1900						decip. p/ten
28						3.85	1.10		1900	—
29						3.15	5.2		1450	650
30	7.50	T		1950		5.80	6.2		1450	800
31	7.70	T		2300	(Comp)	3.90	5.20		1600	1050

September, 1967

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EFFLUENT DITCHES

Month of:

August, 1967

42-383

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	8.0	Tr.	18	1750	.2	7.5	.03	23	1170	.2
2	7.7	0	5	1450	<.1	5.9	.70	188	1450	1.6
3										
4										
5										
6										
7	7.8	Tr.	11	2400	.2	6.7	.70	83	1170	.6
8	7.5	Tr.	23	2400	.3	8.3	.06	37	1450	.3
9	7.7	Tr.	11	2400	.2	8.3	.15	18	1450	.2
10	6.7	.02	57	1170	.4	8.0	.60	193	1300	1.5
11	3.7	Tr.	50	1170	.4	7.9	.65	200	1300	1.6
12	7.3	Tr.	50	1170	.4					
13	7.3	Tr.	18	1750	.2					
14	7.4	.02	21	2400	.3	7.2	.35	198	1170	1.4
15	7.7	Tr.	15	2700	.2	6.0	.65	295	1170	2.1
16	7.8	Tr.	8	2550	.1	6.2	.80	210	1170	1.5
17	7.5	0	20	2700	.3	6.8	.45	127	1450	1.1
18	7.5	Tr.	50	1450	.4	6.8	.30	280	1050	1.8
19	7.3	Tr.	30	1500	.3	7.5	.10	70	920	.4
20	7.5	Tr.	18	2400	.3	7.7	.35	30	1170	.2
21	6.8	.10	281	2500	4.2	6.2	.03	78	920	.4
22	7.9	Tr.	13	2700	.2	3.3	.40	980	1170	6.9
23	7.1	Tr.	20	2400	.3	6.1	.80	89	1300	.7
24	7.8	Tr.	15	2550	.2	6.3	1.0	244	1300	1.9
25	7.6	Tr.	108	1750	1.13	2.9	.25	30	920	.2
26	7.7	Tr.	0	1300	0	7.2	.30	50	1170	.4
27	6.0	.05	55	2700	.9	7.8	.35	44	1450	.4
28	7.4	.01	15	2400	.2	8.7	.40	71	1170	.1
29	7.8		8	2700	.1	7.1		98	1450	.8
30										
31										

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EFFLUENT DITCHES

Month of: Aug

42-383

1981 East West

Date	pH	Settled Solids Vol. %	P ₂₀₅ ppm	GPM	TPD	pH	Settled Solids Vol. %	P ₂₀₅ ppm	GPM	TPD
1	8.0	Tr	11	1750	.2	7.5	.03	23	1120	.2
2	7.7	0	5	1450	5.1	5.9	.20	125	1420	1.6
3										
4										
5										
6										
7	7.2	Tr	11	2400	.2	6.7	.11	83	1150	.6
8		Tr	23	2400	.3		.06	37	1160	.3
9	7.7	Tr	11	2400	.2	7.3	.15	K	1150	.2
10	6.7	Tr	51	1170	.4	6.7	.60	113	1215	1.5
11	3.7	Tr	50	1170	.4	2.9	.45	70	1350	1.6
12	7.3	Tr	51	1170	.4					
13	7.3	Tr	18	1780	.2					
14	7.4	.02	31	440	.3		.35	198	1150	1.1
15	7.7	Tr	15	2400	.2	6.0	.65	295	1150	2.1
16	7.8	Tr	8	2400	.1	6.2	.50	210	1150	1.5
17	7.5	0	20	2200	.3	6.8	.115	127	1150	1.1
18			50	✓	.4	6.8	.30	32	✓	1.8
19	7.3	Tr	30	1200	.3	7.5	.10	70	1200	.4
20	7.5	Tr	18	2400	.3	7.7	.20	30	1150	.2
21	6.8	Tr	281	1200	.12	7.2	.12	78	1150	.1
22	7.7	Tr	13	✓	.2	7.2	.40	980	1150	6.9
23	7.1	Tr	20	2400	.3	6.1	.50	19	✓	.7
24	7.8	Tr	15	✓	.2	6.2	.1	2400	220	1.9
25	7.6	Tr	10	1750	1.1	2.9	.25	30	720	.2
26	7.7		5	1750	0				720	.4
27	6.8	.05	55	2700	.9			47	1450	.4
28	7.4		15	✓	.2			11	✓	.1
29	7.1	.02	8	✓	.1		.25	98	1450	.8
30	7.8	Tr	0	2950	0	6.0	1.1	42	1620	.4
31	7.7		7	✓	.1	6.1		32	1600	.3

EFFLUENT DITCHES

PORTION OF:

August

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	7.3	0					3.5	1/31		
2	8.0	T				7.5	.3			
3	-	-				-	-			
4	7.7	0				5.9	7.0	60.4		
5	-			2400		-		1250		
6	-					-				
7	7.8	T				6.7	2.0			
8	7.5	T				8.3	.6			
9	7.7	T		2700		8.3	1.5	207.1		205
10	6.7	.2				8.0	6.0			
11	3.7	T				7.9	6.5			
12	7.3	T				-				
13	7.3	T		1750		-	-			200
14	7.4	.2		2400		7.2	3.5			115
15	7.7	T		2700		6.0	6.5			117
16	7.8	T		2550		6.2	8.0	61.7		117
17	7.5	0		2700		6.8	2.5			145
18	7.5	T		1450		6.8	3.0			105
19	7.3	T		1500		7.5	1.0			92
20	7.5	T		2400		7.7	3.5			1170
21	6.8	.1		2550		6.2	.3			920
22	7.9	T		2700		3.3	4.0			1170
23	7.1	T		2400		6.1	8.0			1300
24	7.8	T		2550		6.3	10.0	71.5		1300
25	7.6	T		1750		2.9	2.5			920
26	7.7	T		1300		7.2	3.0			117
27	6.0	.5		2750		7.8	3.5			145
28	7.4	.1		2400		8.7	4.0			1170
29	7.8	.2		2700		7.1	2.5			145
30	7.8	T		2750		6.0	11.0			160
31	7.8	T		2700		7.4	10			160

EFFLUENT DITCHES

MARCH 67

July, 1967

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1										
2										
3	8.3	0	5	1800	< .1	9.0	.80	60	920	.3
4										
5	8.7	0	7	1050	< .1	8.9	0	18	920	.1
6	6.3	.80	300	1050	1.9	5.3	.50	460	900	2.5
7	7.5	.02	80	1450	.7	8.3	.50	800	800	.4
8	7.9	Tr.	13	920	< .1	9.3	1.3	3	700	< .1
9	7.2	Tr.	230	1170	1.6	8.6	.30	62	800	.3
10	8.0	Tr.	5	1300	< .1	7.2	.95	151	1170	1.1
11	8.2	0	7	930	< .1	6.8	.15	105	1170	.7
12	8.2	Tr.	5	1170	< .1	7.5	Tr.	28	930	.2
13						8.3	.30	10	1170	< .1
14	7.3	0	50			3.0	.15	1600		
15										
16	8.0	0	9	1600	< .1	6.5	Tr.	92	700	.4
17	7.6	Tr.	25	1600	.2	6.4	.02	72	930	.4
18	7.3	Tr.	37	1900	.4	7.3	Tr.	48	930	.3
19	6.6	0	28	1450	.2					
20	8.5	Tr.	30	1750	.3	8.3	.01	113	1050	.7
21	8.1	Tr.	80	1170	.6	7.9	.08	80	930	.4
22	8.2	.01	30	1450	.3	7.9	.02	70	930	.4
23	7.0	.01	67	1170	.5	8.1	.15	55	1050	.3
24	8.0	0	7	1170	< .1	7.9	.04	83	1050	.4
25	8.0	0	8	1170	< .1	7.5	.30	147	1300	1.1
26	8.0	.01	5	1450	< .1	7.8	.02	86	1170	.6
27	7.9	0	8	1450	< .1	7.6	.02	37	1300	.3
28	6.9	0	50	1450	.4	6.6	.02	440	1300	3.4
29										
30	7.8	0	8	1450	< .1	6.5	.20	720	1170	5.0
31	8.2	0	8	1450	< .1	6.8	.35	183	1450	1.6

EFFLUENT DITCHES

Month of:

July - 67

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1										111.3	
2											
3											
4	8.3	-0-				9.0	8.0				
5	8.7	0				7.9	0				
6	6.3	8.0				5.3	5.0			53.9	
7	7.5	12				8.3	5.0				
8	7.9	T				9.2	12.0				
9	7.2	T				8.6	8.0				
10	8.0	T				7.2	0.5				
11	8.2	-0-				6.8	1.5				
12	7.2	T				7.5	T			4.6	
13	-	-				8.3	3				
14	7.3	0				3.0	1.5				
15	-	-									
16	8.0	0				6.5	T				
17	7.6	T				6.4	12				
18	7.3	T				7.3	T				
19	6.6	-0-				-	-			54.4	
20	8.5	T				8.3	1				
21	8.1	T				7.9	.8				
22	8.2	1				7.9	12				
23	7.0	1				8.1	1.5				
24	8.0	0				7.9	.4				
25	8.0	-0-				7.5	2.0				
26	8.0	1				7.8	.2				
27	7.9					7.6	2.2				
28	6.1	0				6.6	12			21.0	
29	-	-				-	-				
30	-	-				-	-				
31	7.0	0				6.5	2				

EFFLUENT DITCHES

Month of:

49-383

143.7 (2.01) East 3200 7.9 14.3 6.2 50.1
 2.7 pH 44 P₂O₅ 1300 P₂O₅ 1.2 Settled Solids Vol.% 25 West 100 P₂O₅ 1.2

Date

Date	pH	Settled Solids Vol.%	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol.%	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1										
2										
3			5	1400	<.1			6	720	.3
4										
5			7	1400	<.1			14	720	.1
6	6.3		300	1050	1.9			460	900	2.3
7	7.3	82	80	1450	.7	8.3		80	720	.1
8	7.1	7	13	920	<.1	7.3	1.3	3	700	<.1
9	7.2		200	1120	1.6		1.30	1.2	1120	.3
10	7.0		5	130	<.1			121	1120	1.1
11	7.2	0	7	930	<.1	6.7	.15	2	1120	.7
12	8.4		5	1120	<.1	7.5	7.1		930	.2
13						8.3	.3	10	1120	<.1
14	7.3		50			8.0	.15	1.5		
15										
16	6.0	0	7	1120	<.1	6.5	Tr		700	.4
17	7	7	25	1100	.2	6.7	.2	22	930	.1
18	7.3	10	37	700	.1			41	930	.3
19	6.6	0	20	1450	.2					
20			30	1700	.3			113	1050	.7
21	8.1	Tr	3	1120	.6	7.9			930	.4
22	8.2	.1	30	1450	.3	7.9			720	.1
23	7.0	.1	60	1120	.5	7.1			1120	.3
24	7.0	0	7	1120	<.1	7.9	.04	72	1120	.4
25	7.0	0	3	1120	<.1	7.5	.20	110	1120	1.1
26				1450	<.1	7.8	.32	1.3	1120	.6
27			8	1120	<.1	7.4	.2	5	1300	.3
28		0	50	1450	.4			110	1300	3.4
29										
30	7.8	0	8	1450	<.1	6.5	0.20	720	1120	5.0
31	8.2	0		1450	<.1	6.8	.25	710	1450	1.6

49-383

June, 1967

June, 1967

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EFFLUENT DITCHES

Month of:

JUNE

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ 5/29 TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ 5/29 TPD
1	2.4	T	11	2400	176.2	5.4	6.0	8	1450	77.1
2	3.4	T	9	750		7.9	.3	9	1750	
3	7.1	.0	9							
4	4.7	.1	12	2700		2.8	0.0	8	1450	
5	7.4		10.5			2.4	1.0	8	1450	
6	7.2	T	12	2700		5.0	2.0	8	1450	
7	7.0	T				7.0	5.0		2000	
8	7.7	T	12	2700	16.0	6.7	.5	7	1170	
9	7.0	.1	7.5	1100		4.5	.4	8	1450	196
10	7.6	T	7.5	300		6.9	.1			
11	7.8	T	12	2700		6.1	.7	9	1750	
12	8.0	T	12	2700		5.8	1.0	8.5	1600	
13	7.8	T	12	2700		6.2	1.5	8.5	1600	
14	7.5	1.6	11	2400		4.5	1.0	8	1450	
15	7.6	T	12	2700	11.3	5.0	1.0	7	1170	72
16	*	-	-	-		*	-	-	-	
17	7.7	.2	9	1750		6.6	.3	7	1170	
18	7.4	.1	10.5	2700		6.8	2.0	8	1450	
19	7.9	.1	11	2400		2.7	.7	7.5	1300	
20	7.9	T	10.5	2250		3.6	1.0	7.5	1300	
21	7.9	T	11	2400		3.5	2.0	8	1450	
22	8.1	T	11.5	2550	2.1	6.3	4.5	8	1450	65
23	8.2	T	7.5	1300		7.4	.1	6.5	1050	
24	8.1	T	7.5	1300		6.7	.1	7.5	1300	
25	8.0	T	9.5	1900		4.0	2.0	7.5	1300	
26	8.2	T	10.5	2000		6.1	1.5	6.5	1050	
27	7.5	T	9.5	1300		2.2	.3	6.5	1050	
28										
29	7.4	T	10.5	2200		6.2	T	7.5	1300	111
30										
31	No. 841101				71	GRAB SAMPLE				

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EFFLUENT DITCHES

Month of:

May, 1967

42-383

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	7.1	Tr.	720	2050	0.9 0.8	2.6	.6	1600	1600	15.
2	7.3	Tr.	250	2400	0.4 0.6	2.3	Tr.	3760	1600	36.
3	7.3	Tr.	17	2400	.2	2.5	.10	2600	1450	22.
4	7.3	Tr.	23	2550	.4	5.3	1.5	280	1300	2.
5	7.1	.01	80	2050	1.0	6.1	3.1	180	1600	1.
6	7.3	.01	33	2050	.4	6.5	.01	115	1300	.
7	7.3	.01	25	2550	.4	4.7	.08	300	1600	2.
8	7.3	Tr.	8	2400	.1	6.2	.03	83	1450	.
9	7.1	Tr.	37	2700	.6	5.4	.06	23	1600	.
10	7.6	Tr.	7	2700	.1	5.6	2.5	280	1450	2.
11	7.7	Tr.	25	2400	.4	7.8	2.0	53	1450	.
12	4.7	Tr.	170	2200	2.2	2.9	3.1	1220	1600	11.
13	5.8	Tr.	170	2200	2.2	5.1	2.0	720	1170	5.
14	6.7	Tr.	44	2550	.7	5.2	4.0	650	1300	5.
15	7.6	Tr.	13	2550	.2	3.3	4.0	890	1300	6.
16	7.6	Tr.	17	2700	.3	4.0	1.0	330	1450	2.
17	7.1	.00	25	2700	.4	6.8	2.5	75	1450	.
18	3.5	.02	276	3100	5.1	6.7	2.1	139	1450	1.
19	5.5	.01	169	1450	1.5	7.1	1.0	108	1300	.
20	6.4	Tr.	130	2050	1.6	4.6	Tr.	230	1600	2.
21	6.9	.01	92	2400	1.3	6.3	.4	65	1600	.
22	7.8	Tr.	- 0 -	2400	.01	4.0	.3	260	1450	2.
23	7.9	0	8	2200	.1	3.3	.06	550	1450	4.
24	7.9	.01	11	2400	.2	3.4	.10	550	1450	4.
25	7.8	Tr.	8	2550	.1	6.7	Tr.	95	1600	.
26	6.9	.01	44	1170	.3	5.5	1.0	210	1300	1.
27	7.1	.01	86	2050	1.1	4.0	.2	260	1450	2.
28	7.2	.01	75	2400	1.1	3.1	.3	920	1450	8.
29										
30	7.1	.01	25	2400	0.4	4.1	.4	350	1450	3.
31	7.8	Tr.	3	2550	0.1	3.1	.15	890	1450	7.

EFFLUENT DITCHES

Month of:

MAY

East

West

Date	pH	Settled Solids				PPM	TSS		pH	Settled Solids				PPM	TSS	
		Vol. %	P ₂ O ₅ ppm	GPM						Vol. %	P ₂ O ₅ ppm	GPM				
1	7.1	T	10	2050					2.6	.6	8½	1600				
2	7.3	T	11	2400					2.3	T	8½	1600				
3	7.3	T	11	2400					2.5	1.0	8	1480				
4	7.3	T	11½	2550	151.3				5.3	1.5	7½	1300	142			
5	7.1	.1	10	2050					6.1	3.1	8½	1600				
6	7.3	.1	10	2050					6.5	.1	7½	1300				
7	7.3	.1	11½	2550					4.7	.8	8½	1600				
8	7.3	T	11	2400					6.2	.3	8	1450				
9	7.1	T	12	2700					5.4	.6	8½	1600				
10	7.6	T	12	2700					5.6	2.5	8	1450				
11	7.7	T	11	2400	11.8				7.8	2.0	8	1450	45			
12	4.7	T	10½	2200					2.9	3.1	8½	1600				
13	5.8	T	10½	2200					5.1	2.0	7	1170				
14	6.7	T	11½	2550					5.2	4.0	7½	1300				
15	7.6	T	11½	2550					3.3	2.0	7½	1300				
16	7.6	T	12	2700					4.0	1.0	8	1450				
17	7.1	0	12	2700					4.8	2.5	8	1450				
18	3.5	.2	13	3100	3.0				6.7	2.1	8	1450	6			
19	5.5	.1	9	1250					7.1	1.0	7½	1300				
20	6.4	T	10	2050					4.6	T	8½	1600				
21	6.9	.7	11	2400					6.3	.4	8½	1600				
22	7.8	T	11	2400					4.0	.3	8	1450				
23	7.9	0	10½	2200					3.3	.6	8	1450				
24	7.9	.1	11	2400	2				3.7	1.0	8	1450				
25	7.8	—	11½	2550					6.7	T	8½	1600				
26	4.7	.1	7	1170					5.5	1.0	7½	1300				
27	4.1	.1	10	2050					4.0	.2	8	1450				
28	4.2	.1	11	2400					3.1	.3	8	1450				
29																
30	7.1	.1	11	2400	176.2				4.1	.4	8	1450	77			
31	7.2	T	11½	2550					3.1	1.5	8	1450				

EFFLUENT DITCHES

Month of: May

42-383

271.7 (2.01) 1718 70270
30 East (.8)
(7.0) Settled Solids P₂O₅ (2713) P₂O₅
pH Vol. % ppm GPM TPD
(4.8) Settled Solids P₂O₅ (543) P₂O₅
pH Vol. % ppm GPM TPD

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	2.1	Tr	721	2050	1.8	2.6	.6	1600	1600	15.3
2	2.3	Tr	257	2400	1.3	2.3	Tr	3760	1600	36.1
3	2.3	Tr	17	2400	.2	2.3	.1	2600	1400	22.1
4	2.3	Tr	23	2400	.4	5.3	1.5	230	1400	2.2
5	7.1	.01	80	2050	1.0	6.1	3.1	180	1600	1.7
6	7.3	.01	33	2050	.4	6.5	.01	115	1300	.9
7	2.3	.01	25	2550	.4	4.7	.08	300	1600	2.9
8	2.3	Tr	8	2400	.1	6.2	.03	83	1450	.7
9	7.1	Tr	37	2700	.6	5.4	.06	23	1600	.2
10	7.6	Tr	7	2700	.1	5.6	2.5	280	1400	2.4
11	7.7	Tr	25	2400	.4	7.8	2.0	53	1400	.5
12	4.7	Tr	170	2400	2.2	2.9	3.1	1220	1400	11.7
13	5.9	Tr	170	2200	2.2	3.1	2.0	720	1100	5.1
14	6.7	Tr	44	2400	.7	5.2	2.0	650	1400	5.1
15	7.6	Tr	13	2400	.2	3.0	4.0	890	1400	6.9
16	7.6	Tr	17	2700	.3	4.0	1.0	350	1450	2.5
17	7.1	.0	25	2700	.4	6.8	2.5	75	1450	.5
18	3.5	.02	276	3100	5.1	6.7	2.1	139	1450	1.2
19	5.5	.01	169	1450	1.5	7.1	1.0	108	1300	.8
20	6.4	Tr	130	2050	1.6	4.6	Tr	230	1600	2.2
21	6.9	.01	92	2400	1.3	6.3	.4	65	1600	.6
22	7.8	Tr	-0-	2400	-0-	4.0	.3	250	1450	2.3
23	7.9	0	8	2200	.1	3.3	.06	550	1450	4.0
24	7.9	.01	11	2400	.2	5.4	.10	550	1450	4.0
25	7.8	Tr	8	2550	.1	6.7	Tr	95	1400	.4
26	6.9	.01	114	1170	.3	5.5	1.0	217	1300	1.6
27	7.1	.01	Tr	2050	1.1	4.0	.2	240	1450	2.2
28	7.2	.01	Tr	2400	1.1	3.1	.3	50	1450	8.0
29										
30	7.1	.01	25	2000	6.4	4.1	.4	350	1450	3.0
31	7.8	Tr	Tr	2550	0.1	3.1	.15	50	1450	2.7

April 1967

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W e s t

Date	pH	Settled Solids Vol.%	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	2.8	Tr.	530	2400	7.5
2	2.3	.01	600	2550	9.0
3	5.9	.01	57	2550	1.0
4	3.6	.01	173	3300	3.0
5	3.2	.01	198	3100	3.5
6	4.0	Tr.	55	2700	1.0
7	3.6	Tr.	420	2050	5.0
8					
9	6.1	.03	170	2400	2.5
10	7.3	Tr.	11	2400	0.2
11	6.1	.01	127	2400	2.0
12	7.1	Tr.	23	2400	.3
13	6.7	Tr.	27	2550	.4
14	6.6	Tr.	46	2050	.6
15	7.1	.01	75	2050	.9
16	3.7	Tr.	135	2400	2.0
17	7.4	Tr.	17	2550	.3
18					
19	3.4	Tr.	370	2400	5.3
20	6.9	Tr.	30	2400	.4
21	7.5	.01	27	2050	.3
22	6.8	Tr.	37	2200	.5
23	6.9	Tr.	23	2200	.3
24	7.4	Tr.	18	2400	.3
25	7.1	Tr.	27	2200	.4
26	7.3	Tr.	25	2200	.3
27	7.3	Tr.	15	2400	.2
28	4.1	Tr.	130	1750	1.4
29	7.1	.01	37	1900	.4
30	7.0	Tr.	53	2050	.7
31					

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APR 1 1967

W e s t

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Month of:

42-383

[illegible]

EFFLUENT DITCHES

Month of:

March 1967

East

West

Date	pH	Settled Solids			GPM	P ₂ O ₅			pH	Settled Solids			GPM	P ₂ O ₅		
		Vol. %	ppm	TPD		Vol. %	ppm	TPD		Vol. %	ppm	TPD		Vol. %	ppm	TPD
1	2.4	Tr.	390	2950	6.5				2.9	.18	780	1050	5			
2	2.4	Tr.	295	3300	5.5				3.7	.20	610	1450	5			
3	2.1		460	3300	9.0				3.1		530	1300	4			
4	2.3		460	3100	8.0				5.0		370	1170	2			
5	2.4	Tr.	325	3100	6.0				3.3	.20	420	1450	3			
6	2.6	Tr.	268	3500	5.0				2.5	.07	750	1600	7			
7	2.5	Tr.	300	2700	5.0				2.0	.07	720	1600	7			
8	2.7	Tr.	250	2750	4.0				3.0	.10	600	1600	6.0			
9	3.0	Tr.	165	2400	2.0				4.8	.10	210	1600	2.0			
10	2.6	Tr.	330	2750	5.5				6.1	.07	200	1300	1.5			
11	2.3	Tr.	370	2550	5.0											
12	2.5	Tr.	370	3500	7.5				5.1	.35	750	1450	6.5			
13	3.0	Tr.	204	3300	4.0				6.8	.20	75	1450	.5			
14	2.9	Tr.	350	2700	5.5											
15	2.7	Tr.	440	3100	8.0				2.4	.05	1930	1600	18.0			
16	2.5	Tr.	460	3300	9.0				2.5	.08	1350	1450	12.0			
17	2.1	Tr.	670	3300	13.0				3.2	.01	830	1300	6.5			
18	2.1	Tr.	480	2400	7.0											
19	2.3	Tr.	460	3100	8.5											
20	2.3	Tr.	440	3500	9.5				5.3	2.5	420	1600	4.0			
21	2.2	.02	420	3100	8.0				2.8	.40	1200	1600	11.5			
22	2.1	Tr.	460	2700	7.5				3.6	.35	780	1170	5.0			
23	2.4	.01	440	2500	6.5				2.5	.30	2300	1300	18.0			
24	2.4	.01	500	2700	8.0				2.3	1.2	2600	1300	20.0			
25																
26																
27	2.7	Tr	230	2950	4.0				4.4	.53	620	1600	6.0			
28	2.6	.01	350	2700	5.5				3.0	.45	1390	1450	12.0			
29	2.5	.03	460	2550	7.0				4.7	.58	720	1450	6.0			
30	2.5	.01	420	2400	6.0				4.2	1.10	890	1600	8.0			
31	2.7	Tr	480	2550	7.0				3.6	1.50	1550	1450	13.0			

EFFLUENT DITCHES

Month of: 11-27

42-383

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	PPM P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	PPM P ₂ O ₅ TPD
1	2.4	T	12 1/2"	2950	227	2.9	1.8	6 1/2	1050	227
2		T	12 1/2"	3000		3.0	2.0	8"	1200	
3			12 1/2"	3000	654	3.1		7 1/2	1000	110
4						3.2				
5		.1	12 1/2"	3000		3.3	2.0		1250	
6	2.6	T	12 1/2"	3000		3.5		8 1/2	1200	
7										
8		T	12 1/2"	3000		3.6				163
9		.1	12 1/2"	3000	464	3.7	1.0	7 1/2		
10						3.8				
11						—	—	—	—	
12	2.5	T		3000		3.1	3.5	7 1/2	1200	
13	3.0	T	13 1/2"	3000		3.2	2.0	8"	1250	
14	2.7	T	12 1/2"	2700		—	—	—	—	
15	2.7	T	12 1/2"	3100		2.4	.5	8 1/2	1200	
16		.1			471	2.5	.8			185
17	2.1	T	13 1/2"	3300		3.3	.1	7 1/2	1000	
18	2.1	T	11"	2400		—	—	—	—	
19	2.3	T	13"	3100			—			
20	2.3	T	12"	3500		3.4	2.5	8 1/2	1200	
21	2.2	.2	13"	3100		3.2	4.0	8 1/2	1200	
22		T	12"	3700		3.6	3.5	7"	1170	
23	2.4	.1	11 1/2"	2550	828	2.5	2.0	7 1/2	1300	12
24	2.4	.1	12"	2700		2.3	12.0	7 1/2	1300	7
25										
26										
27	2.7	T	12 1/2"	2950		4.4	5.3	8 1/2	1650	
28	2.6	.1	12 1/2"	2700		3.0	4.5	8"	1450	
29	2.5	.3	11 1/2"	2550		4.7	5.8	8"	1450	172
30	2.5	.1	11"	2400	1033	4.2	11.0	8 1/2	1600	
31	2.5	T	11 1/2"	2550		2.6	15.0	8"	1150	

EFFLUENT DITCHES

Month of: March

49-383

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	✓ 2.0	TV	300	2200	6.5	2.7		700	1150	5
2	✓ 2.4	TV	200	2200	5.5	2.0	.20	600		5
3	✓ 2.1		400			1		200		1
4					8					2
5	✓ 2.4	TV	320	2100	6	2.3	.20	700	1150	3.5
6	2.6		200	2500	5	2.5		150	1500	7
7		TV	200		5		.20	700	1150	5
8	2.7	TV	250	2200	4	2.1	.15	600	1100	6
9	3.0	TV	100	2100	2	4.2		10	1100	2
10	2.6	TV	330	2750	5.5	6.1	.07	200	900	10
11	2.3	TV	320	2200	5					
12	2.5	TV	370		7.5	1	.35	700	1100	6.5
13	2.0	TV	200	2200	4	6.8	.20	75	1100	1.5
14	2.7	TV	300	2200	5.5					
15	2.7	TV	410	3100	8	2.4	.05	1730	1100	18
16	2.5	TV	460	3300	9		.08	1300	1100	12
17	✓ 2.1	TV	670	3300	13	3.2	.01	300	1300	6
18	✓ 2.1	TV	470	2400	7					
19	2.3	TV	400	3100	8.5					
20	2.3	TV	410	3500	9.5	5.3	2.5	420	1600	4
21	2.2	.02	420	3100	8	2.8	.40	1200	1600	11.5
22	✓ 2.1	TV	410	2700	7.5	3.6	.35	200	1170	5
23	✓ 2.4	.01	440	2500	6.5	2.5	.20	2300	1200	18
24	2.4	.01	500	2700	8	2.3	1.2	2000	1200	20
25										
26										
27	2.7	TV	230	2950	4	4.1	.23	620	1600	6
28	2.6	.01	350	2700	5.2	3.0	.45	1300	1450	12
29	2.5	.05	400	2500	7	4.7	.58	720	1150	6
30	2.5	.01	420	2400	6	4.2	1.10	890	1200	
31	2.0	TV	400		7			1200	1100	13

718 (TV) 11247 84611 193.0 92.9 10.59 22395 35.90 191
 2.5 2.9 2924 6.7 3.7 3.46 9104 14.20 766
 E a s t W e s t

Ans. b. c.

February 1967

E a s t

W e s t

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EFFLUENT DITCHES

Month of:

February, 1967

East

West

Date	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled Solids Vol. %	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
1	3.5	.01	130	2700	2	2.8	.6	1430	1200	11
2	2.7	.01	400	2000	1	2.8	.5	1000	1300	5
3	2.6		500	1000	4	2.8		920	1300	7
4	2.2		230	1100	7	4.4		500	1450	3
5	2.6		100	7000	15	2.4		700	1200	6
6	2.7	.01	300	3000	7	2.7	.14	700	1000	14
7	2.7	.01	350	3200	7	3.6	.7	1700	1300	6
8	2.3	.01	500	4700	10	4.3	.7	500	1050	5
9	2.5	.01	305	2300	6	2.8	.2	670	1100	4
10										
11	4	.01	295	2000	6	5.1		1000	490	1.5
12	2.4		270	1000	5	5		1200	1150	2
13	2.5		270	1000	5	2.5		1530	1000	11
14	2.5	Tr	300	2000	8.5	2.5	.75	1300	1100	9
15	2.5		400	2000	8.5	2.5	.30	920	1300	7
16	2.6	.01	400	2500	7	3.1	.30	570	1100	
17										
18										
19	2.4	.02	430	2000	9	2.7	.40	700	920	4
20	2.6	Tr	300	2000	7	6.8	.15	150	1170	1
21										
22	2.6	Tr	200	1000	5	2.6		700	1000	1
23	2.5	.01	300	2200	1	6.6	.11	100	1750	1.5
24	2.4	Tr	300	2000	4	2.5	.12	2000	1000	2
25	2.4	Tr	300	2000	5	2.4	.18	2000	1000	1.5
26	2.4	Tr	300	2000	10	6.5	.50	2000	1000	2.5
27	2.8	Tr	173	2000	4	6.6		2000	1000	2
28	2.5	.01	400	2000	5	6.7	.10	350	1000	2
29	62.2		8083	84100	164	12.75	16.1	17016	28240	124
30	2.4	.01	300	2000	7	2.4	.33	2000	1000	2
31	2.6		300	2500	7	11.5	.9	7424	1170	1.5

EFFLUENT DITCHES

Month of:

January

East

West

Date	pH	Settled*	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD	pH	Settled*	P ₂ O ₅ ppm	GPM	P ₂ O ₅ TPD
		Solids Vol. %					Solids Vol. %			
1			(541)	(3012)	(70)	(4.16)		(700)	(2,250)	(15)
2	2.3	120	1,510	3,300	30	4.0	4,500	1,230	2,550	18
3	2.4	160	1,120	3,300	22	4.0	2,600	950	2,700	15
4	2.5	130		2,700		4.1	6,025		2,500	
5			600					980		
6	2.4	20	750			4.9		670		
7										
8	2.3	70	700	3,950	17	2.8	3,500	1,600	2,200	21
9	2.6	350	480	3,300	9	5.3	7,500	670	2,400	9
10										
11	3.3	18,000	750	1,170	5	4.6	3,000	1,350	2,550	21
12	3.4	1,200	315	2,700	6	6.4	4,000	370	2,550	6
13			250					950		
14			370					620		
15	3.1	2,000	370	2,700	6	3.4	1,000	1,830	2,700	30
16	2.8	2,000	600	2,700	9	6.0	6,500	1,020	2,550	16
17	3.3	1,500	890	2,950	16	6.0	1,200	720	2,200	9
18	3.8	2,300	390	2,550	6	4.4	7,500	1,150	1,900	13
19	3.7	4,00	370	3,100	8	2.5	4,050	2,100	2,700	35
20										
21			860							
22	2.7	170	330	2,700	6	7.3	1,600	250	3,100	4
23	2.7	170	276	2,950	5	6.1	1,500	285	3,100	6
24	3.3	2,000	530	3,100	10	2.3	3,000	1,980	2,700	32
25	2.1	140	620	3,100	11	4.2	1,250	460	2,950	8
26	2.5	400	390	3,300	8	5.0	5,000	570	2,950	10
27	2.2	70	390	3,300	8	2.4	6,500	1,120	3,100	25
28	2.1	90	460	3,100	8					
29	2.7	70	415	3,300	9	6.7	3,000	380	3,300	7
30	3.0	40	250	3,500	5	5.1	4,500	700	3,300	14
31	2.7	80	285	3,500	6	4.0	2,700	920	1,750	10

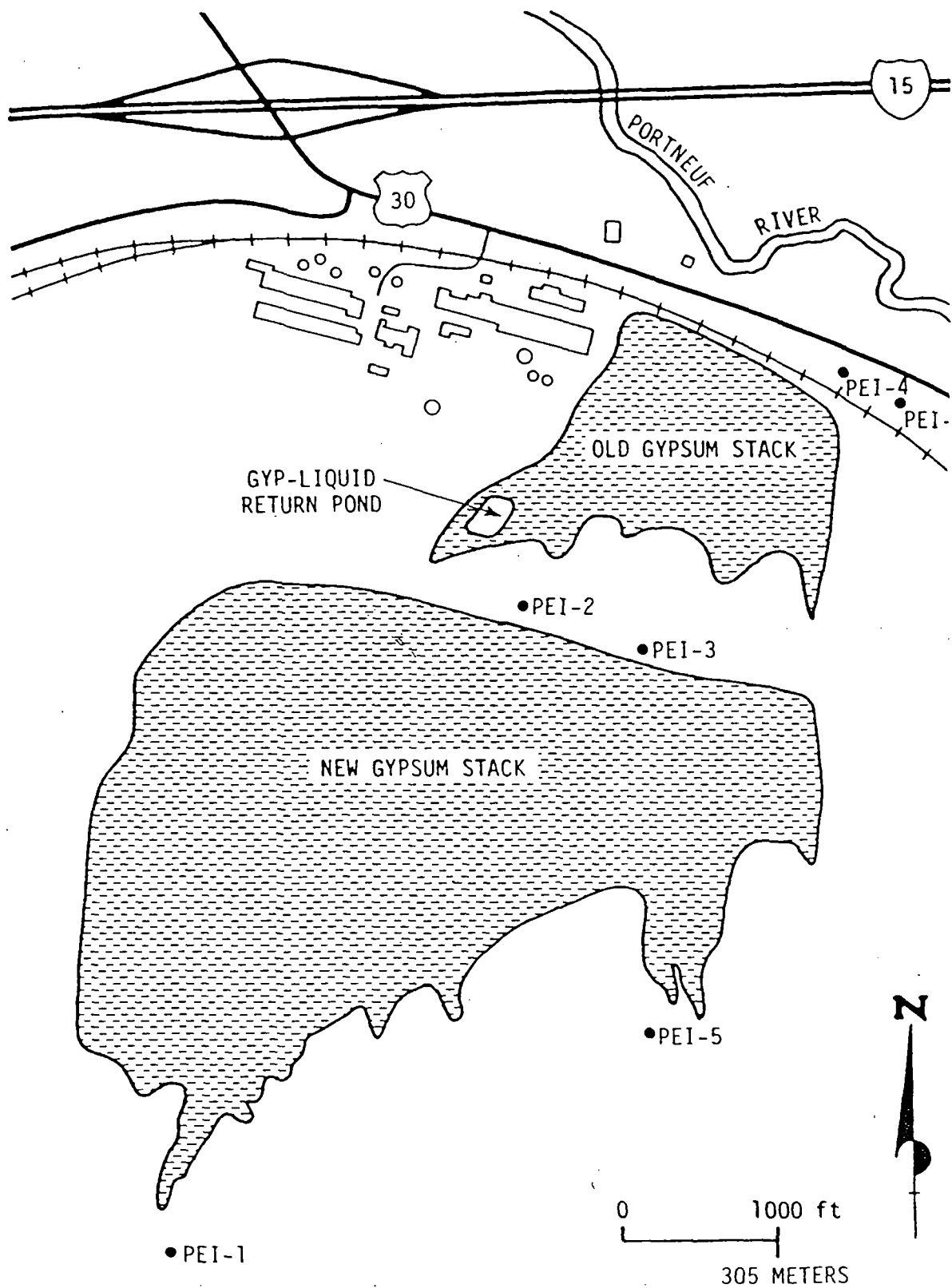


Figure 6-4.* PEI groundwater monitoring program at the J. R. Simplot study site.

6-10

*EVALUATION OF WASTE MANAGEMENT FOR PHOSPHATE PROCESSING by PEI Associates, Inc.,
April 1985

Exhibit #21

5.2.100

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	P04	K	RESO	SE	SI02	AG	SAR	NA	S04	SURF	TDS	KJEL	VA	ZN	PH
1	09/28/78	226.	.015	0	0	.12	0		.10	0	58.40		32.	0	0	530.	.006	0	.70	2.5	8.5		.037	0	.03	23.50	.013	0	0	.029	1.20	.02	6.42		0	28.25	0	.92	32.90	53.	0	340.	0	.04	.073	7.29
2	05/28/79	236.	.02	.10	.002	.09	0		.23	0	64.		36.	.008	0	650.	.055	0	.63	2.2	10.2		.03	0	.046	19.20	0	0	.01	0	.78	.06	6.04		0	33.	0	1.017	36.11	44.	0	390.	.90	0	.054	7.74
3	09/10/79	236.	.11	0	.001	.08	0		.14	0	85.60		36.	.007	.023	550.	.009	0	.58	2.6	11.		.04	0	.048	33.60	.004	0	0	0	.82	.10	5.61		0	29.	0	1.241	43	40.	0	356.	.10	0	.054	7.60

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	PO4	K	RESO	SE	SI02	AG	SAR	NA	SO4	SURF	TDS	KJEL	VA	ZN	PH
4	04/28/80	224.	.15	.15	0	.16	0	273.3	.16	0	63.20	0	32.	0	.003	510.	.01	.02	.73	3.5	12.5		.01	0	.048	19.20	0	0	.003	0	0	.10	6.20		0	31.	0	.962	34	45.	0	336.	.50	.002	.03	7.10
5	07/23/80	252.	0	0	.002	.10	0	307.4	.10	.001	64.	0	36.	.004	0	550.	.04	.139	.32	1.2	1.5		.01	0	.048	21.12	.005	0	0	0	0	.46	5.30		0	27.50	0	1.067	38.50	40.	0	360.	0	0	.07	7.80
6	12/10/80	234.	0	0	.002	.09	0	285.5	.195	0	64.80	0	30.20	.034	.004	520.	.01	0	.28	.9	8.5		.02	0	.045	20.64	.005	0	0	0	0	.07	5.		0	29.50	0	.998	36	43.	0	340.	.15	.003	.095	7.40

J R SIMPLOT - POCA TELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

7	03/23/81	ALK	224.	CU	.005	P04	.27
		AL	.01	CN	0	K	5.80
		NH3	0	F	.70	RESO	
		AS	.002	ALFA	0	SE	0
		BA	.10	BETA	0	SI02	30.
		BE	0	OH		AG	0
		HCO3	273.3	FE	.02	SAR	1.039
		B	.11	PB	0	NA	38.10
		CD	0	LI	.05	SO4	60.
		CA	75.20	MG	16.32	SURF	0
		CO3		MN	.01	TDS	365.
		CL	37.73	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.025
		COND	560.	NO3	1.07	PH	8.00
8	10/20/81	ALK	237.5	CU	.007	P04	.30
		AL	0	CN	0	K	5.60
		NH3	.09	F	.60	RESO	.179
		AS	.002	ALFA	0	SE	0
		BA	.11	BETA	0	SI02	34.80
		BE	0	OH	0	AG	0
		HCO3	289.8	FE	.04	SAR	1.093
		B	.118	PB	.005	NA	38
		CD	0	LI	.09	SO4	42.
		CA	60.	MG	19.20	SURF	0
		CO3	0	MN	.014	TDS	310.
		CL	30.60	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	490.	NO3	.21	PH	7.90
9	03/10/82	ALK	245.	CU	.01	P04	.10
		AL	0	CN	.02	K	5.90
		NH3	.05	F	.59	RESO	.25
		AS	.002	ALFA	0	SE	.001
		BA	.105	BETA	0	SI02	35.10
		BE	0	OH	0	AG	0
		HCO3	298.9	FE	.01	SAR	1.057
		B	.105	PB	.003	NA	39
		CD	0	LI	.092	SO4	52.
		CA	67.	MG	22.	SURF	0
		CO3	0	MN	.01	TDS	368.
		CL	34.	HG	0	KJEL	.12
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.028
		COND	550.	NO3	1.17	PH	7.50

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MD-DA-YR

CASE	MD-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	P04	K	RESD	SE	SI02	AG	SAR	NA	S04	SURF	TDS	KJEL	VA	ZN	PH
10	05/13/82	221.5	0	.51	.003	.11	0	270.2	.095	0	68.	0	36.40	.002	0	600.	.01	0	.60	1.4	2.	0	.01	.003	.05	23.	.005	0	0	0	1.40	.07	4.80	-0.854	0	31.80	0	1.043	39	75.	0	398.	.65	0	.02	7.80
11	08/26/82	244.	0	1.35	.002	.11	0	297.6	.12	0	69.60	0	34.90	0	0	580.	.01	0	.62	2.1	2.4	0	.01	0	.048	20.64	.003	0	0	0	1.31	.14	6.	-0.290	.001	32.85	0	1.068	39.50	62.	0	379.	1.58	0	.015	7.80
12	12/08/82	191.	0	.07	0	.105	0	233.	.11	0	69.60	0	35.10	.002	0	580.	.01	0	.59			0	.02	.002	.048	16.80	.002	0	0	0	1.77	.15	6.10	1.034	0	28.	0	1.102	39.50	90.	0	388.	.50	0	.012	8.00

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

13	02/22/83	ALK	240.7	CU	.01	P04	.40
		AL	0	CN	0	K	6.10
		NH3	.08	F	.63	RESO	-0.351
		AS	.002	ALFA	2.	SE	.002
		BA	.13	BETA	1.4	SI02	27.50
		BE	0	OH	0	AG	0
		HCO3	293.7	FE	.01	SAR	1.055
		B	.12	PB	0	NA	39
		CD	0	LI	.048	SO4	74.
		CA	64.	MG	24.	SURF	0
		CO3	0	MN	.003	TDS	388.
		CL	24.60	HG	0	KJEL	.10
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.008
		COND	600.	NO3	1.23	PH	7.50
14	05/27/83	ALK	252.	CU	.03	P04	.08
		AL	.053	CN	.063	K	6.
		NH3	0	F	.53	RESO	-0.048
		AS	.003	ALFA	0	SE	0
		BA	.10	BETA	1.3	SI02	28.80
		BE	0	OH	0	AG	0
		HCO3	307.4	FE	.02	SAR	1.554
		B	.11	PB	0	NA	57
		CD	0	LI	.047	SO4	62.
		CA	64.	MG	23.04	SURF	0
		CO3	0	MN	.002	TDS	420.
		CL	40.	HG	0	KJEL	.20
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.035
		COND	640.	NO3	.24	PH	7.80
15	08/17/83	ALK	254.	CU	.02	P04	.08
		AL	.03	CN	.002	K	6.10
		NH3	.40	F	.62	RESO	.084
		AS	.002	ALFA	0	SE	0
		BA	.11	BETA	1.1	SI02	27.40
		BE	0	OH	0	AG	0
		HCO3	309.8	FE	.025	SAR	1.245
		B	.10	PB	.003	NA	46
		CD	0	LI	.04	SO4	57.
		CA	60.	MG	26.40	SURF	0
		CO3	0	MN	.01	TDS	402.
		CL	40.	HG	0	KJEL	.70
		CR	.001	MO	0	VA	0
		CO	0	NI	0	ZN	.03
		COND	610.	NO3	.30	PH	7.60

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE - MO-DA-YR

16	11/08/83	ALK	218.	CU	0	P04	.10
		AL	.009	CN	.005	K	4.70
		NH3	.80	F	.59	RESO	-0.862
		AS	.003	ALFA	0	SE	0
		BA	.093	BETA	1.3	SI02	24.60
		BE	0	OH	0	AG	0
		HCO3	266.	FE	.03	SAR	.96
		B	.09	PB	0	NA	35.80
		CD	0	LI	.04	SO4	70.
		CA	62.	MG	25.90	SURF	0
		CO3	0	MN	.001	TDS	380.
		CL	36.	HG	0	KJEL	1.10
		CR	.001	MO	0	VA	0
		CO	0	NI	0	ZN	.002
		COND	570.	NO3	0	PH	7.70
17	03/22/84	ALK	276.	CU	.02	P04	.10
		AL	0	CN	0	K	5.50
		NH3	0	F	.59	RESO	4.28
		AS	.002	ALFA	0	SE	0
		BA	.09	BETA	0	SI02	25.10
		BE	0	OH	0	AG	0
		HCO3	336.7	FE	0	SAR	.801
		B	.08	PB	0	NA	41
		CD	0	LI	.05	SO4	230.
		CA	77.60	MG	27.96	SURF	0
		CO3	0	MN	0	TDS	640.
		CL	48.	HG	0	KJEL	.30
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	980.	NO3	1.93	PH	7.80
18	08/15/84	ALK	236.	CU	.012	P04	.08
		AL	.03	CN	0	K	5.80
		NH3	.32	F	.53	RESO	-0.192
		AS	.002	ALFA	0	SE	0
		BA	.12	BETA	3.	SI02	24.50
		BE	0	OH	0	AG	0
		HCO3	287.9	FE	.02	SAR	1.749
		B	.174	PB	.002	NA	63
		CD	0	LI	.047	SO4	53.
		CA	63.20	MG	21.40	SURF	0
		CO3	0	MN	0	TDS	422.
		CL	75.	HG	0	KJEL	.50
		CR	0	MO	0	VA	0
		CO	0	NI	.02	ZN	.018
		COND	650.	NO3	1.83	PH	8.00

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

19	11/12/84	ALK	240.	CU	.01	P04	.78
		AL	.035	CN	0	K	5.83
		NH3	.25	F	.58	RESO	.179
		AS	.002	ALFA	0	SE	0
		BA	.10	BETA	5.	SI02	27.29
		BE	0	OH	0	AG	0
		HCO3	292.8	FE	.02	SAR	1.433
		B	.111	PB	0	NA	52
		CD	0	LI	.05	SO4	48.
		CA	89.60	MG	6.20	SURF	0
		CO3	0	MN	0	TDS	430.
		CL	58.	HG	0	KJEL	.33
		CR	0	MO	0	VA	.006
		CO	0	NI	0	ZN	.01
		COND	650.	NO3	1.43	PH	7.95
20	02/25/85	ALK	230.	CU	0	P04	.02
		AL	.005	CN	0	K	5.80
		NH3	.30	F	.63	RESO	-1.427
		AS	.002	ALFA	0	SE	0
		BA	.10	BETA	6.	SI02	32.53
		BE	0	OH	0	AG	0
		HCO3	281.	FE	.08	SAR	.977
		B	.12	PB	0	NA	39
		CD	0	LI	.052	SO4	98.
		CA	81.70	MG	23.80	SURF	0
		CO3	0	MN	0	TDS	425.
		CL	38.	HG	0	KJEL	.55
		CR	.004	MO	0	VA	0
		CO	0	NI	.06	ZN	.048
		COND	650.	NO3	1.51	PH	7.45
21	06/17/85	ALK	228.	CU	0	P04	.38
		AL	0	CN	0	K	6.10
		NH3	0	F	.50	RESO	-0.750
		AS	0	ALFA	0	SE	0
		BA	.11	BETA	7.	SI02	26.33
		BE	0	OH	0	AG	0
		HCO3	278.2	FE	0	SAR	1.148
		B	.17	PB	.007	NA	43
		CD	0	LI	.046	SO4	70.
		CA	72.	MG	20.90	SURF	0
		CO3	0	MN	0	TDS	402.
		CL	40.	HG	0	KJEL	.15
		CR	0	MO	.02	VA	0
		CO	0	NI	0	ZN	0
		COND	582.	NO3	1.48	PH	7.70

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

22	08/19/85	ALK	230.	CU	0	P04	.02
		AL	.04	CN	0	K	5.20
		NH3	0	F	.55	RESO	-0.283
		AS	.003	ALFA	4.	SE	0
		BA	.09	BETA	7.	SI02	28.03
		BE	0	OH	0	AG	0
		HCO3	281.	FE	0	SAR	1.141
		B	.17	PB	.005	NA	41
		CD	0	LI	.042	SD4	51.
		CA	63.20	MG	21.12	SURF	0
		CO3	0	MN	0	TDS	376.
		CL	40.	HG	0	KJEL	0
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	570.	NO3	1.59	PH	7.85

23	11/13/85	ALK	223.	CU	0	P04	.04
		AL	0	CN	0	K	6.70
		NH3	0	F	.62	RESO	-0.258
		AS	.002	ALFA	0	SE	0
		BA	.10	BETA	5.	SI02	27.26
		BE	0	OH	0	AG	0
		HCO3	284.	FE	.02	SAR	.993
		B	.17	PB	0	NA	35.80
		CD	0	LI	.043	SD4	48.
		CA	67.20	MG	19.	SURF	0
		CO3	0	MN	0	TDS	370.
		CL	36.30	HG	0	KJEL	0
		CR	.003	MO	0	VA	.002
		CO	0	NI	0	ZN	.007
		COND	550.	NO3	1.43	PH	7.65

24	02/19/86	ALK	240.	CU	0	P04	.10
		AL	0	CN	0	K	5.25
		NH3	.20	F	.55	RESO	.465
		AS	0	ALFA	4.	SE	0
		BA	.10	BETA	5.	SI02	26.69
		BE	0	OH	0	AG	0
		HCO3	293.	FE	0	SAR	1.061
		B	.21	PB	.015	NA	39.60
		CD	0	LI	.045	SD4	51.
		CA	72.80	MG	19.90	SURF	0
		CO3	0	MN	0	TDS	464.
		CL	40.50	HG	0	KJEL	5.
		CR	0	MO	0	VA	.003
		CO	0	NI	.082	ZN	.042
		COND	672.	NO3	1.76	PH	8.03

J R SIMPLOT - POCA TELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ANALYSES							
25	05/20/86	ALK	245.	CU	0	PO4	.07		
		AL	0	CN	0	K	5.48		
		NH3	.20	F	.49	RESD	-0.510		
		AS	0	ALFA	0	SE	0		
		BA	.10	BETA	0	SI02	27.52		
		BE	0	OH	0	AG	0		
		HCO3	299.	FE	0	SAR	1.044		
		B	.14	PB	0	NA	39.50		
		CD	0	LI	.041	SO4	52.		
		CA	73.80	MG	21.10	SURF	0		
		CO3	0	MN	.02	TDS	410.		
		CL	42.60	HG	0	KJEL	.50		
		CR	.002	MO	0	VA	0		
		CO	0	NI	.04	ZN	0		
		COND	610.	NO3	1.81	PH	8.05		
		26	07/07/86	ALK	226.	CU	.02	PO4	.28
				AL	.08	CN	0	K	4.97
NH3	.21			F	.54	RESD	-0.372		
AS	0			ALFA	0	SE	0		
BA	.09			BETA	0	SI02	23.11		
BE	0			OH	0	AG	0		
HCO3	275.7			FE	.026	SAR	1.141		
B	.183			PB	0	NA	41		
CD	0			LI	.038	SO4	53.		
CA	65.60			MG	19.70	SURF	0		
CO3	0			MN	0	TDS	388.		
CL	47.90			HG	0	KJEL	.30		
CR	0			MO	0	VA	0		
CO	0			NI	0	ZN	.045		
COND	550.			NO3	1.49	PH	8.10		
27	11/06/86			ALK	228.	CU	0	PO4	0
				AL	0	CN	0	K	5.59
		NH3	0	F	.47	RESD	-0.450		
		AS	0	ALFA	0	SE	0		
		BA	.10	BETA	9.	SI02	24.98		
		BE	0	OH	0	AG	0		
		HCO3	278.2	FE	0	SAR	1.014		
		B	.12	PB	.008	NA	36.91		
		CD	0	LI	.045	SO4	40.		
		CA	68.80	MG	19.20	SURF	0		
		CO3	0	MN	0	TDS	365.		
		CL	51.10	HG	0	KJEL	0		
		CR	0	MO	0	VA	0		
		CO	0	NI	0	ZN	.009		
		COND	560.	NO3	1.54	PH	8.00		

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

28	03/03/87	ALK	222.	CU	0	P04	.08
		AL	0	CN	0	K	5.93
		NH3	.27	F	.66	RESO	-0.538
		AS	0	ALFA	7.	SE	0
		BA	.09	BETA	9.	SI02	26.54
		BE	0	OH	0	AG	0
		HCO3	270.8	FE	0	SAR	1.054
		B	.16	PB	0	NA	38.24
		CD	0	LI	.05	S04	53.
		CA	91.20	MG	5.20	SURF	0
		CO3	0	MN	0	TDS	370.
		CL	40.	HG	0	KJEL	.29
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.007
		COND	590.	NO3	1.51	PH	8.00
29	05/06/87	ALK	246.	CU	0	P04	.11
		AL	0	CN	0	K	6.15
		NH3	.08	F	.49	RESO	-0.655
		AS	.003	ALFA	0	SE	0
		BA	.10	BETA	0	SI02	25.07
		BE	0	OH	0	AG	0
		HCO3	300.	FE	0	SAR	1.106
		B	.16	PB	0	NA	42.46
		CD	0	LI	.046	S04	52.
		CA	88.	MG	14.40	SURF	0
		CO3	0	MN	0	TDS	418.
		CL	50.	HG	0	KJEL	.09
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	650.	NO3	1.73	PH	8.00
30	08/19/87	ALK	242.	CU	0	P04	.08
		AL	0	CN	.017	K	5.85
		NH3	.08	F	.54	RESO	-0.164
		AS	0	ALFA	0	SE	0
		BA	.09	BETA	5.	SI02	28.45
		BE	0	OH	0	AG	0
		HCO3	295.	FE	.02	SAR	1.122
		B	.10	PB	0	NA	40.81
		CD	0	LI	.04	S04	49.
		CA	62.85	MG	22.69	SURF	0
		CO3	0	MN	0	TDS	375.
		CL	41.30	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	580.	NO3	1.90	PH	7.60

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

31	11/13/87	ALK	205.	CU	0	PO4	.08
		AL	0	CN	0	K	5.19
		NH3	.07	F	.51	RESO	-0.774
		AS	0	ALFA	9.	SE	0
		BA	.10	BETA	9.	SI02	31.29
		BE	.002	OH	0	AG	0
		HCO3	250.	FE	.08	SAR	1.059
		B	.09	PB	0	NA	37.99
		CD	0	LI	.04	SO4	69.
		CA	60.89	MG	22.32	SURF	0
		CO3	0	MN	0	TDS	361.
		CL	35.70	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	560.	NO3	1.58	PH	7.80
32	03/16/88	ALK	222.	CU	0	PO4	.08
		AL	0	CN	0	K	5.93
		NH3	.14	F	.62	RESO	-0.498
		AS	.003	ALFA	0	SE	0
		BA	.09	BETA	6.	SI02	30.04
		BE	0	OH	0	AG	0
		HCO3	271.	FE	0.	SAR	1.187
		B	.12	PB	0	NA	42.90
		CD	0	LI	.04	SO4	62.
		CA	93.60	MG	3.30	SURF	0
		CO3	0	MN	0	TDS	390.
		CL	40.50	HG	0	KJEL	.20
		CR	.002	MO	0	VA	0
		CO	.005	NI	0	ZN	0
		COND	590.	NO3	1.55	PH	7.60
33	06/07/88	ALK	208.	CU	0	PO4	.07
		AL	0	CN	0	K	5.66
		NH3	0	F	.63	RESO	-6.240
		AS	0	ALFA	0	SE	0
		BA	.09	BETA	6.	SI02	30.
		BE	0	OH	0	AG	0
		HCO3	254.	FE	0	SAR	.962
		B	.11	PB	0	NA	34.25
		CD	0	LI	.04	SO4	50.
		CA	96.	MG	3.10	SURF	0
		CO3	0	MN	0	TDS	368.
		CL	37.80	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.08
		COND	580.	NO3	3.	PH	7.80

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

34	10/07/88	ALK	218.	CU	0	P04	.10
		AL	0	CN	0	K	6.17
		NH3	0	F	.58	RESO	-0.725
		AS	0	ALFA	0	SE	0
		BA	.10	BETA	0	SI02	29.19
		BE	0	OH	0	AG	0
		HCO3	266.	FE	0	SAR	.942
		B	.10	PB	0	NA	34.52
		CD	0	LI	.05	SO4	53.
		CA	96.80	MG	3.12	SURF	0
		CO3	0	MN	0	TDS	369.
		CL	42.	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	580.	NO3	1.17	PH	8.30
35	03/23/89	ALK	218.	CU	0	P04	.13
		AL	0	CN	0	K	5.84
		NH3	.07	F	.57	RESO	-0.876
		AS	0	ALFA	0	SE	0
		BA	.09	BETA	0	SI02	29.25
		BE	0	OH	0	AG	0
		HCO3	266.	FE	0	SAR	.935
		B	.11	PB	0	NA	34.81
		CD	0	LI	.05	SO4	54.
		CA	84.	MG	12.72	SURF	0
		CO3	0	MN	0	TDS	378.
		CL	46.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	780.	NO3	1.51	PH	7.40
36	05/15/89	ALK	221.	CU	.02	P04	.05
		AL	0	CN	.004	K	6.36
		NH3	.05	F	.73	RESO	-0.600
		AS	0	ALFA	0	SE	0
		BA	.09	BETA	0	SI02	28.59
		BE	0	OH	0	AG	0
		HCO3	270.	FE	0	SAR	1.055
		B	.11	PB	0	NA	38.47
		CD	0	LI	.05	SO4	55.
		CA	63.91	MG	22.36	SURF	0
		CO3	0	MN	0	TDS	368.
		CL	40.70	HG	0	KJEL	.08
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	0
		COND	580.	NO3	1.52	PH	7.80

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

37	09/11/89	ALK	193.	CU	0	PO4	.13
		AL	0	CN	0	K	5.69
		NH3	.06	F	.66	RESO	-0.880
		AS	0	ALFA	3.	SE	0
		BA	.09	BETA	5.	SI02	30.13
		BE	0	OH	0	AG	0
		HCO3	235.	FE	0	SAR	1.01
		B	.12	PB	0	NA	35.66
		CD	0	LI	.05	SO4	61.
		CA	59.69	MG	21.37	SURF	0
		CO3	0	MN	0	TDS	368.
		CL	41.60	HG	0	KJEL	.08
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.06
		COND	536.	NO3	1.56	PH	7.70
38	10/11/89	ALK	208.	CU	0	PO4	0
		AL	0	CN	0	K	5.66
		NH3	0	F	.64	RESO	-0.477
		AS	0	ALFA	0	SE	0
		BA	.09	BETA	4.	SI02	31.20
		BE	0	OH	0	AG	0
		HCO3	254.	FE	.05	SAR	.989
		B	.08	PB	0	NA	34.65
		CD	0	LI	.05	SO4	48.
		CA	58.73	MG	20.82	SURF	0
		CO3	0	MN	0	TDS	325.
		CL	34.90	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.08
		COND	510.	NO3	1.41	PH	7.80
39	03/26/90	ALK	220.	CU	0	PO4	.08
		AL	0	CN	0	K	6.10
		NH3	.09	F	.58	RESO	-0.504
		AS	0	ALFA	0	SE	0
		BA	.10	BETA	6.	SI02	29.85
		BE	0	OH	0	AG	.006
		HCO3	268.	FE	0	SAR	1.004
		B	.11	PB	0	NA	36.11
		CD	0	LI	.05	SO4	48.
		CA	63.93	MG	20.78	SURF	0
		CO3	0	MN	0	TDS	436.
		CL	40.40	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	583.	NO3	1.07	PH	7.80

J R SIMPLOT - POCA TELLO

FRONTIER WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

40	07/05/90	ALK	213.	CU	0	PO4	.14
		AL	0	CN	0	K	5.04
		NH3	.13	F	.66	RESO	-0.243
		AS	0	ALFA	0	SE	0
		BA	.08	BETA	4.	SI02	27.88
		BE	0	OH	0	AG	0
		HCO3	260.	FE	0	SAR	.977
		B	.08	PB	0	NA	33.72
		CD	0	LI	.04	SO4	56.
		CA	57.62	MG	19.84	SURF	0
		CO3	0	MN	0	TDS	376.
		CL	39.50	HG	0	KJEL	2.18
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	483.	NO3	1.38	PH	7.71
41	10/18/90	ALK	211.	CU	.03	PO4	.69
		AL	.07	CN	0	K	4.97
		NH3	0	F	.70	RESO	-0.087
		AS	.004	ALFA	0	SE	0
		BA	.096	BETA	0	SI02	39.30
		BE	.002	OH	0	AG	0
		HCO3	257.	FE	.21	SAR	1.25
		B	0	PB	.004	NA	35.51
		CD	.006	LI	.05	SO4	51.
		CA	54.52	MG	18.62	SURF	0
		CO3	0	MN	.02	TDS	404.
		CL	34.90	HG	0	KJEL	.05
		CR	0	MO	.02	VA	0
		CO	0	NI	0	ZN	.04
		COND	464.	NO3	1.47	PH	7.90

J R SIMPLOT - POCATELLO

FRONTIER WELL - CHEMICAL ANALYSES

AVERAGES 09/28/78 TO 01/09/91

ALK	228.9	CU	.009	P04	.151
AL	.016	CN	.007	K	5.718
NH3	.149	F	.584	RESO	-17.230
AS	.001	ALFA	1.1	SE	.00
BA	.10	BETA	4.1	SI02	29.005
BE	.00	OH	0	AG	.00
HCO3	279.4	FE	.021	SAR	1.087
B	.124	PB	.001	NA	39.59
CD	.00	LI	.048	S04	60.
CA	70.406	MG	19.158	SURF	0
CO3	0	MN	.003	TDS	388.
CL	39.86	HG	0	KJEL	.433
CR	.002	MO	.001	VA	.002
CO	.001	NI	.006	ZN	.026
COND	590.	NO3	1.315	PH	7.76

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	PO4	K	RESO	SE	SI02	AG	SAR	NA	SO4	SURF	TDS	KJEL	VA	ZN	PH
1	02/15/78	244.	.07	0	0	.10		297.6	.14	0	84.80	0	50.	0		775.	.009		.74	3.6	12.		.045	0	0	25.44	.008	0	.001	.65	.15	6.29		0	37.	0	1.395	57	134.	0	504.	0		.005	7.61	
2	05/03/78	220.	.04	0	0	.14			.10	0	77.60	0	40.	0	.003	670.	.021	0	.99	4.	15.		.023	0	0	37.44	.009	0	0	.80	.02	7.39		0	35.	0	.49	21	116.	0	435.	0		.013	7.14	
3	09/28/78	224.	.09	0	0	.11			.17	0	76.	0	32.	0	0	660.	.004	0	1.01	3.	8.		.009	.011	.017	17.70	.02	0	.003	.90	.04	7.35		0	32.25	0	1.209	45	110.	0	430.	0		.03	.024	6.90

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MD-DA-YR

CASE	MD-DA-YR	CHEMICAL ANALYSES									
4	05/25/79	ALK	270.	CU	.004	PO4	0				
		AL	.03	CN	0	K	7.83				
		NH3	.01	F	.85	RESO					
		AS	.003	ALFA	3.2	SE	.001				
		BA	.09	BETA	9.5	SI02	38.50				
		BE	0	OH		AG	0				
		HCO3		FE	0	SAR	1.303				
		B	.20	PB	0	NA	54.10				
		CD	0	LI	.069	SO4	135.				
		CA	90.40	MG	24.48	SURF	0				
		CO3		MN	.003	TDS	600.				
		CL	40.	HG	0	KJEL	.92				
		CR	.003	MO	0	VA	0				
		CO	.005	NI	0	ZN	.002				
		COND	.920.	NO3	.82	PH	7.63				
		5	09/10/79	ALK	242.	CU	.009	PO4	.06		
AL	.021			CN	0	K	6.98				
NH3	0			F	.83	RESO					
AS	.001			ALFA	2.5	SE	0				
BA	.07			BETA	12.	SI02	35.				
BE				OH		AG	0				
HCO3	295.2			FE	.06	SAR	1.448				
B	.15			PB	0	NA	54				
CD	0			LI	.066	SO4	100.				
CA	98.40			MG	4.32	SURF	0				
CO3				MN	.005	TDS	449.				
CL	32.			HG	0	KJEL	.05				
CR	.007			MO		VA	0				
CO	.028			NI	.004	ZN	.027				
COND	700.			NO3	.53	PH	8.10				
6	04/28/80			ALK	230.	CU	0	PO4	.10		
		AL	.065	CN	.002	K	7.				
		NH3	0	F	.84	RESO					
		AS	0	ALFA	2.5	SE	0				
		BA	.22	BETA	8.5	SI02	35.				
		BE	0	OH		AG	0				
		HCO3	280.6	FE	.03	SAR	1.251				
		B	.125	PB	0	NA	48.50				
		CD	0	LI	.065	SO4	110.				
		CA	78.40	MG	21.60	SURF	0				
		CO3		MN	0	TDS	445.				
		CL	36.	HG	0	KJEL	0				
		CR	0	MO	0	VA	0				
		CO	.004	NI	.005	ZN	0				
		COND	690.	NO3	0	PH	7.20				

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
7	07/23/80	ALK	300.	CU	.02	P04	.38				
		AL	0	CN	0	K	8.				
		NH3	0	F	1.01	RESO	0				
		AS	.002	ALFA	0	SE	0				
		BA	.09	BETA	0	SIO2	34.80				
		BE	0	OH	0	AG	0				
		HCO3	366.	FE	.01	SAR	1.951				
		B	.13	PB	0	NA	86				
		CD	.002	LI	.075	S04	198.				
		CA	100.	MG	28.80	SURF	0				
		CO3	0	MN	.002	TDS	680.				
		CL	50.	HG	0	KJEL	0				
		CR	.004	MO	0	VA	.018				
		CO	0	NI	0	ZN	.01				
		COND	1050.	NO3	1.41	PH	7.80				
		8	12/10/80	ALK	314.	CU	.01	P04	.09		
				AL	0	CN	0	K	8.		
NH3	0			F	.46	RESO	0				
AS	.003			ALFA	1.9	SE	0				
BA	.085			BETA	10.7	SIO2	34.50				
BE	0			OH	0	AG	0				
HCO3	383.1			FE	.02	SAR	1.528				
B	.245			PB	.001	NA	69				
CD	0			LI	.07	S04	174.				
CA	112.			MG	25.92	SURF	0				
CO3	0			MN	0	TDS	620.				
CL	41.70			HG	0	KJEL	.40				
CR	0			MO	0	VA	0				
CO	.006			NI	0	ZN	.005				
COND	950.			NO3	1.06	PH	7.30				
9	03/23/81			ALK	322.	CU	.012	P04	.28		
				AL	.07	CN	0	K	8.		
		NH3	0	F	.83	RESO	0				
		AS	.002	ALFA	0	SE	.001				
		BA	.085	BETA	0	SIO2	33.				
		BE	0	OH	0	AG	0				
		HCO3	392.9	FE	.02	SAR	1.542				
		B	.15	PB	.002	NA	70				
		CD	.001	LI	.075	S04	162.				
		CA	112.	MG	26.88	SURF	0				
		CO3	0	MN	.015	TDS	620.				
		CL	52.40	HG	.0041	KJEL	0				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	.01				
		COND	950.	NO3	1.29	PH	7.70				

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	P04	K	RESD	SE	SI02	AG	SAR	NA	SO4	SURF	TDS	KJEL	VA	ZN	PH
10	10/20/81	307.	.01	.36	.005	.088	0	374.5	.155	0	100.	0	52.50	0	0	800.	.015	0	.75	0	0	0	.06	.003	.10	33.60	.014	0	0	0	.51	.30	8.60	-1.612	0	43.40	0	1.59	72	174.	0	640.	.80	.01	.012	7.50
11	03/10/82	275.8	0	.34	.004	.08	0	336.5	.145	0	106.	0	42.20	0	0	950.	.01	.01	.81	0	0	0	.01	0	0	28.	0	0	0	.92	.09	8.20	-0.725	0	18.95	0	1.775	69.50	190.	0	615.	.50	0	.01	7.20	
12	05/13/82	319.4	0	1.40	.004	.075	0	389.7	.135	0	108.	0	47.30	.002	0	1050.	0	.012	.77	1.7	1.6	0	.01	0	0	31.50	.005	0	0	.012	1.33	.15	4.80	-1.589	0	42.20	0	1.959	90	210.	0	690.	1.89	0	.01	7.60

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

16	05/27/83	ALK	268.	CU	.01	PO4	.10
		AL	.81	CN	.026	K	8.50
		NH3	0	F	.81	RESO	-1.477
		AS	.004	ALFA	0	SE	0
		BA	.08	BETA	1.1	SI02	33.70
		BE	0	OH	0	AG	0
		HCO3	326.9	FE	.01	SAR	1.858
		B	.15	PB	0	NA	79
		CD	0	LI	.072	SD4	182.
		CA	86.40	MG	30.72	SURF	0
		CO3	0	MN	.003	TDS	625.
		CL	52.	HG	0	KJEL	.08
		CR	.002	MO	.005	VA	0
		CO	0	NI	0	ZN	.002
		COND	950.	NO3	.24	PH	7.80
17	08/17/83	ALK	330.	CU	.01	PO4	.11
		AL	.005	CN	.011	K	7.20
		NH3	.30	F	.81	RESO	1.146
		AS	.005	ALFA	0	SE	0
		BA	.085	BETA	1.2	SI02	32.60
		BE	0	OH	0	AG	0
		HCO3	402.6	FE	.015	SAR	1.878
		B	.18	PB	0	NA	85
		CD	0	LI	.07	SD4	180.
		CA	92.	MG	38.40	SURF	0
		CO3	0	MN	.004	TDS	650.
		CL	50.	HG	.0003	KJEL	.80
		CR	.001	MO	0	VA	0
		CO	0	NI	0	ZN	.006
		COND	990.	NO3	.20	PH	7.60
18	11/08/83	ALK	268.	CU	.009	PO4	.10
		AL	.014	CN	.014	K	7.20
		NH3	1.80	F	.76	RESO	-2.131
		AS	.006	ALFA	0	SE	0
		BA	.079	BETA	1.5	SI02	32.
		BE	0	OH	0	AG	0
		HCO3	327.	FE	.02	SAR	1.431
		B	.15	PB	0	NA	63.70
		CD	0	LI	.07	SD4	180.
		CA	90.	MG	36.50	SURF	0
		CO3	0	MN	.012	TDS	680.
		CL	44.	HG	0	KJEL	2.15
		CR	.002	MO	0	VA	.01
		CO	0	NI	0	ZN	.002
		COND	900.	NO3	.14	PH	7.20

J R SIMPLOT - POCA TELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

19	03/22/84	ALK	284.	CU	0	PO4	.12
		AL	.005	CN	0	K	7.37
		NH3	0	F	1.01	RESO	1.85
		AS	.005	ALFA	0	SE	0
		BA	.10	BETA	0	SI02	31.
		BE	0	OH	0	AG	0
		HCO3	346.5	FE	0	SAR	3.13
		B	.05	PB	.069	NA	70
		CD	0	LI	.07	SO4	334.
		CA	102.80	MG	29.28	SURF	0
		CO3	0	MN	0	TDS	840.
		CL	52.	HG	0	KJEL	.20
		CR	.002	MO	0	VA	.02
		CO	0	NI	0	ZN	0
		COND	1290.	NO3	1.33	PH	7.30
20	08/15/84	ALK	276.	CU	.014	PO4	.23
		AL	0	CN	0	K	8.30
		NH3	.23	F	.78	RESO	-2.626
		AS	.007	ALFA	0	SE	0
		BA	.08	BETA	5.	SI02	21.70
		BE	0	OH	0	AG	0
		HCO3	336.7	FE	.02	SAR	1.455
		B	.179	PB	.061	NA	67.50
		CD	0	LI	.07	SO4	172.
		CA	100.	MG	38.40	SURF	0
		CO3	0	MN	0	TDS	620.
		CL	75.	HG	0	KJEL	.45
		CR	0	MO	.02	VA	0
		CO	0	NI	0	ZN	.008
		COND	940.	NO3	1.06	PH	7.90
21	11/12/84	ALK	288.	CU	.01	PO4	.35
		AL	.005	CN	0	K	8.40
		NH3	.40	F	.79	RESO	-1.560
		AS	.006	ALFA	0	SE	0
		BA	.08	BETA	9.	SI02	37.10
		BE	0	OH	0	AG	0
		HCO3	351.4	FE	.02	SAR	3.012
		B	.161	PB	.014	NA	67.60
		CD	0	LI	.074	SO4	162.
		CA	102.40	MG	26.90	SURF	0
		CO3	0	MN	0	TDS	595.
		CL	46.	HG	0	KJEL	.65
		CR	.003	MO	.01	VA	.007
		CO	0	NI	0	ZN	.005
		COND	900.	NO3	1.12	PH	7.68

J R SIMPLOT - POCA TELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ANALYSES									
22	02/25/85	ALK	279.	CU	0	P04	.06				
		AL	.004	CN	0	K	8.50				
		NH3	.05	F	.82	RES	-3.310				
		AS	.008	ALFA	0	SE	0				
		BA	.08	BETA	7.	SI02	43.66				
		BE	0	OH	0	AG	0				
		HCO3	340.	FE	0	SAR	1.411				
		B	.15	PB	0	NA	68.40				
		CD	0	LI	.075	SO4	238.				
		CA	125.70	MG	31.80	SURF	0				
		CO3	0	MN	0	TDS	680.				
		CL	44.	HG	0	KJEL	.16				
		CR	.006	MO	.03	VA	.006				
		CO	0	NI	0	ZN	.005				
		COND	1050.	NO3	1.17	PH	7.20				
		23	06/17/85	ALK	266.	CU	0	P04	.38		
AL	0			CN	0	K	8.60				
NH3	0			F	.76	RES	-1.769				
AS	.008			ALFA	0	SE	0				
BA	.08			BETA	12.	SI02	37.06				
BE	0			OH	0	AG	0				
HCO3	324.5			FE	0.	SAR	1.502				
B	.19			PB	.002	NA	65				
CD	0			LI	.06	SO4	174.				
CA	114.40			MG	16.80	SURF	0				
CO3	0			MN	0	TDS	610.				
CL	55.			HG	0	KJEL	0				
CR	.03			MO	0	VA	.005				
CO	0			NI	0	ZN	0				
COND	940.			NO3	1.23	PH	8.20				
24	08/19/85			ALK	290.	CU	0	P04	.39		
		AL	0	CN	0	K	7.90				
		NH3	.10	F	.80	RES	1.516				
		AS	.009	ALFA	0	SE	0				
		BA	.07	BETA	6.	SI02	35.70				
		BE	0	OH	0	AG	0				
		HCO3	354.	FE	0	SAR	1.819				
		B	.20	PB	0	NA	80				
		CD	0	LI	.067	SO4	191.				
		CA	106.40	MG	24.48	SURF	0				
		CO3	0	MN	0	TDS	654.				
		CL	49.70	HG	0	KJEL	.14				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	.013				
		COND	980.	NO3	1.32	PH	7.45				

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

25	11/19/85	ALK	284.	CU	0	P04	.41
		AL	0	CN	0	K	7.58
		NH3	.50	F	.83	RESO	-1.808
		AS	.012	ALFA	0	SE	.002
		BA	.07	BETA	6.	SI02	34.57
		BE	0	OH	0	AG	0
		HCO3	346.	FE	.05	SAR	1.349
		B	.17	PB	0	NA	60
		CD	0	LI	.031	SO4	160.
		CA	114.	MG	21.80	SURF	0
		CO3	0	MN	0	TDS	509.
		CL	47.	HG	0	KJEL	.95
		CR	.004	MO	0	VA	.009
		CO	0	NI	0	ZN	0
		COND	912.	NO3	1.23	PH	7.40
26	02/19/86	ALK	279.	CU	0	P04	.50
		AL	0	CN	0	K	7.90
		NH3	1.40	F	.83	RESO	-1.710
		AS	.012	ALFA	12.	SE	0
		BA	.08	BETA	7.	SI02	35.30
		BE	0	OH	0	AG	0
		HCO3	340.	FE	0	SAR	1.504
		B	.27	PB	0	NA	66
		CD	0	LI	.07	SO4	160.
		CA	110.40	MG	21.60	SURF	0
		CO3	0	MN	.02	TDS	620.
		CL	47.	HG	0	KJEL	1.62
		CR	.002	MO	0	VA	.002
		CO	0	NI	0	ZN	.006
		COND	961.	NO3	1.38	PH	7.85
27	05/20/86	ALK	203.	CU	0	P04	.40
		AL	0	CN	0	K	5.86
		NH3	.18	F	.91	RESO	-0.600
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	7.	SI02	35.03
		BE	0	OH	0	AG	0
		HCO3	247.6	FE	0	SAR	1.294
		B	.14	PB	0	NA	50
		CD	0	LI	.057	SO4	87.
		CA	67.60	MG	15.60	SURF	0
		CO3	0	MN	0	TDS	398.
		CL	36.30	HG	0	KJEL	.35
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	610.	NO3	1.27	PH	8.05

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

28	11/06/86	ALK	206.	CU	0	P04	.41
		AL	0	CN	0	K	6.52
		NH3	0	F	.76	RESO	-0.656
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	6.	SI02	30.90
		BE	0	OH	0	AG	0
		HCO3	251.3	FE	0	SAR	1.308
		B	.13	PB	0	NA	46.49
		CD	0	LI	.005	SO4	72.
		CA	72.	MG	14.40	SURF	0
		CO3	0	MN	0	TDS	388.
		CL	50.80	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.006
		COND	600.	NO3	1.15	PH	8.00
29	03/03/87	ALK	216.	CU	0	P04	.33
		AL	0	CN	0	K	6.85
		NH3	.15	F	.96	RESO	-0.656
		AS	0	ALFA	9.	SE	0
		BA	.07	BETA	11.	SI02	32.39
		BE	0	OH	0	AG	0
		HCO3	263.5	FE	0	SAR	1.339
		B	.16	PB	0	NA	48.55
		CD	0	LI	.06	SO4	91.
		CA	81.60	MG	11.	SURF	0
		CO3	0	MN	0	TDS	410.
		CL	34.	HG	0	KJEL	.18
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	630.	NO3	1.02	PH	8.00
30	05/06/87	ALK	230.	CU	0	P04	.47
		AL	0	CN	0	K	7.07
		NH3	.08	F	.81	RESO	-1.084
		AS	.002	ALFA	0	SE	0
		BA	.07	BETA	7.	SI02	31.69
		BE	0	OH	0	AG	0
		HCO3	281.	FE	0	SAR	1.462
		B	.16	PB	0	NA	56.68
		CD	0	LI	.061	SO4	118.
		CA	92.80	MG	12.90	SURF	0
		CO3	0	MN	0	TDS	468.
		CL	39.90	HG	0	KJEL	.08
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	730.	NO3	1.14	PH	7.80

J R SIMPLOT - POCA TELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

31	08/19/87	ALK	220.	CU	0	PO4	.43
		AL	0	CN	0	K	5.84
		NH3	.07	F	.92	RESO	-0.200
		AS	.01	ALFA	8.	SE	0
		BA	.06	BETA	5.	SI02	34.91
		BE	0	OH		AG	0
		HCO3	268.	FE	.02	SAR	1.722
		B	.13	PB	0	NA	60
		CD	0	LI	.06	SO4	95.
		CA	62.43	MG	17.99	SURF	0
		CO3	0	MN	0	TDS	412.
		CL	37.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	650.	NO3	1.30	PH	7.40
32	10/13/87	ALK	172.	CU	0	PO4	.11
		AL	0	CN	0	K	7.59
		NH3	.08	F	.82	RESO	-0.635
		AS	.004	ALFA	5.	SE	0
		BA	.08	BETA	6.	SI02	37.30
		BE	0	OH	0	AG	0
		HCO3	210.	FE	0	SAR	1.311
		B	.09	PB	0	NA	43.03
		CD	0	LI	.05	SO4	80.
		CA	52.72	MG	17.60	SURF	0
		CO3	0	MN	0	TDS	345.
		CL	33.50	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	550.	NO3	1.21	PH	7.50
33	03/16/88	ALK	203.	CU	0	PO4	.42
		AL	0	CN	0	K	6.26
		NH3	.13	F	.62	RESO	-1.797
		AS	.01	ALFA	0	SE	0
		BA	.06	BETA	9.	SI02	35.90
		BE	0	OH	0	AG	0
		HCO3	248.	FE	0	SAR	1.34
		B	.12	PB	0	NA	54.90
		CD	0	LI	.06	SO4	154.
		CA	87.20	MG	18.40	SURF	0
		CO3	0	MN	0	TDS	482.
		CL	36.70	HG	0	KJEL	.15
		CR	0	MO	0	VA	.007
		CO	0	NI	0	ZN	0
		COND	740.	NO3	1.12	PH	7.60

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	PO4	K	RESD	SE	SI02	AG	SAR	NA	SO4	SURF	TDS	KJEL	VA	ZN	PH
34	06/07/88	193.	0	0	.009	.07	0	235.	.12	0	92.80	0	36.50	0	0	620.	0	0	.94	0	0	0	0	0	.06	2.80	0	0	0	0	2.20	.32	6.68	-1.007	0	37.28	0	1.24	44.63	84.	0	410.	0	.02	0	7.60
35	10/07/88	194.	0	0	0	.07	0	237.	.10	0	81.60	0	34.90	0	0	565.	0	0	.79	0	5.	0	0	0	.06	5.76	0	0	0	0	.81	.48	6.51	-0.659	0	32.85	0	1.194	41.38	77.	0	369.	0	0	0	8.10
36	03/23/89	193.	0	.06	0	.06	0	235.	.11	0	81.60	0	48.	0	0	600.	0	0	.96	0	0	0	0	0	.06	11.52	0	0	0	0	1.12	.35	6.17	1.63	0	34.67	0	1.159	42.20	80.	0	394.	.08	0	0	7.55

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MD-DA-YR

CASE	MD-DA-YR	CHEMICAL ANALYSES									
37	05/15/89	ALK	203.	CU	0	P04	.32				
		AL	0	CN	.005	K	6.82				
		NH3	0	F	1.	RESO	-0.583				
		AS	0	ALFA	0	SE	0				
		BA	.07	BETA	6.	SI02	34.13				
		BE	0	OH	0	AG	0				
		HCO3	248.	FE	0	SAR	1.374				
		B	.11	PB	0	NA	48.18				
		CD	0	LI	.06	S04	83.				
		CA	61.95	MG	18.96	SURF	0				
		CO3	0	MN	0	TDS	376.				
		CL	37.10	HG	0	KJEL	0				
		CR	0	MO	0	VA	.02				
		CO	0	NI	0	ZN	0				
		COND	610.	NO3	1.18	PH	7.85				
		38	09/11/89	ALK	180.	CU	0	P04	.40		
				AL	0	CN	0	K	6.15		
NH3	.15			F	.85	RESO	-0.890				
AS	.005			ALFA	0	SE	0				
BA	.06			BETA	6.	SI02	34.88				
BE	0			OH	0	AG	0				
HCO3	220.			FE	0	SAR	1.32				
B	.14			PB	0	NA	45.51				
CD	0			LI	.06	S04	90.				
CA	60.46			MG	18.05	SURF	0				
CO3	0			MN	0	TDS	369.				
CL	37.50			HG	0	KJEL	.17				
CR	0			MO	0	VA	0				
CO	0			NI	0	ZN	0				
COND	580.			NO3	1.18	PH	7.60				
39	10/11/89			ALK	194.	CU	0	P04	.26		
				AL	0	CN	0	K	6.39		
		NH3	0	F	.91	RESO	-0.592				
		AS	.008	ALFA	0	SE	0				
		BA	.07	BETA	4.	SI02	36.36				
		BE	0	OH	0	AG	0				
		HCO3	237.	FE	0	SAR	1.291				
		B	.10	PB	0	NA	44.43				
		CD	0	LI	.06	S04	78.				
		CA	59.76	MG	18.20	SURF	0				
		CO3	0	MN	0	TDS	360.				
		CL	33.50	HG	0	KJEL	0				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	0				
		COND	550.	NO3	1.14	PH	7.30				

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

CASE MO-DA-YR

40	03/26/90	ALK	202.	CU	0	PO4	.35
		AL	0	CN	0	K	6.13
		NH3	.05	F	.74	RESO	-0.467
		AS	.009	ALFA	0	SE	0
		BA	.07	BETA	7.	SI02	33.68
		BE	0	OH	0	AG	0
		HCO3	246.	FE	0	SAR	1.285
		B	.09	PB	0	NA	44.33
		CD	0	LI	.06	SO4	71.
		CA	61.71	MG	17.29	SURF	0
		CO3	0	MN	0	TDS	384.
		CL	35.	HG	0	KJEL	.05
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	594.	NO3	1.01	PH	8.00
41	07/05/90	ALK	199.	CU	0	PO4	.41
		AL	0	CN	0	K	6.35
		NH3	.14	F	.99	RESO	-0.549
		AS	.006	ALFA	0	SE	0
		BA	.07	BETA	5.	SI02	34.90
		BE	0	OH	0	AG	0
		HCO3	243.	FE	.07	SAR	1.408
		B	.10	PB	0	NA	48.74
		CD	0	LI	.06	SO4	92.
		CA	60.44	MG	18.45	SURF	0
		CO3	0	MN	0	TDS	460.
		CL	40.90	HG	0	KJEL	.53
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	503.	NO3	1.15	PH	7.51
42	10/18/90	ALK	205.	CU	.03	PO4	.35
		AL	.07	CN	0	K	6.05
		NH3	.04	F	.90	RESO	-0.610
		AS	.022	ALFA	0	SE	0
		BA	.066	BETA	0	SI02	41.10
		BE	.001	OH	0	AG	0
		HCO3	250.	FE	.06	SAR	1.36
		B	.12	PB	.003	NA	47.32
		CD	0	LI	.07	SO4	89.
		CA	63.84	MG	18.56	SURF	0
		CO3	0	MN	0	TDS	462.
		CL	34.10	HG	0	KJEL	1.75
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.08
		COND	516.	NO3	1.12	PH	7.60

J R SIMPLOT - POCATELLO

WELL #4 - CHEMICAL ANALYSES

AVERAGES 02/15/78 TO 01/09/91

ALK	248.7	CU	.005	P04	.257
AL	.031	CN	.002	K	7.239
NH3	.24	F	.839	RESO	-21.871
AS	.005	ALFA	1.5	SE	.00
BA	.082	BETA	5.4	SI02	34.854
BE	.00	OH	0	AG	0
HCO3	304.4	FE	.015	SAR	1.594
B	.144	PB	.004	NA	58.92
CD	.00	LI	.057	S04	150.
CA	89.31	MG	22.461	SURF	0
CO3	0	MN	.003	TDS	539.
CL	42.89	HG	.0001	KJEL	.427
CR	.002	MO	.002	VA	.004
CO	.001	NI	.001	ZN	.007
COND	815.	NO3	1.031	PH	7.59

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

1	02/23/78	ALK	180.	CU	.01	P04	.02
		AL	.08	CN		K	5.28
		NH3	0	F	.88	RESO	
		AS	0	ALFA	8.	SE	0
		BA	.05	BETA	10.	SI02	35.
		BE		OH		AG	0
		HCO3	219.6	FE	.06	SAR	1.213
		B	.12	PB	0	NA	39.50
		CD	0	LI	0	SO4	70.
		CA	52.	MG	17.28	SURF	0
		CO3		MN	.01	TDS	324.
		CL	32.	HG	0	KJEL	0
		CR	0	MO		VA	.08
		CO	.026	NI	0	ZN	.04
		COND	500.	NO3	.54	PH	7.79
2	05/03/78	ALK	180.	CU	.03	P04	.03
		AL	.07	CN	0	K	6.24
		NH3	0	F	1.	RESO	
		AS	0	ALFA	9.	SE	0
		BA	.12	BETA	17.	SI02	34.
		BE		OH		AG	0
		HCO3		FE	.05	SAR	
		B	.11	PB	.003	NA	
		CD	.001	LI	0	SO4	76.
		CA	56.	MG	33.60	SURF	0
		CO3		MN	.02	TDS	357.
		CL	50.	HG	0	KJEL	0
		CR	0	MO		VA	
		CO	.002	NI	0	ZN	.016
		COND	550.	NO3	.73	PH	7.29
3	10/13/78	ALK	192.	CU	0	P04	.02
		AL	.02	CN	0	K	7.18
		NH3	0	F	1.08	RESO	
		AS	0	ALFA	3.	SE	0
		BA	.09	BETA	6.	SI02	33.
		BE		OH		AG	0
		HCO3		FE	0	SAR	1.228
		B	.16	PB	.002	NA	42.30
		CD	0	LI	.02	SO4	85.
		CA	62.40	MG	16.80	SURF	0
		CO3		MN	.02	TDS	365.
		CL	32.	HG	0	KJEL	0
		CR	0	MO		VA	.06
		CO	0	NI	0	ZN	.033
		COND	555.	NO3	.80	PH	6.93

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

4	06/01/79	ALK	196.	CU	.003	PO4	0
		AL	.01	CN	0	K	6.90
		NH3	0	F	1.	RESO	
		AS	.004	ALFA	4.	SE	.001
		BA	.09	BETA	8.	SIO2	39.
		BE	.001	OH		AG	0
		HCO3		FE	.01	SAR	1.114
		B	.165	PB	0	NA	42.39
		CD	.001	LI	.057	SO4	74.
		CA	62.40	MG	28.80	SURF	0
		CO3		MN	0	TDS	370.
		CL	30.	HG	0	KJEL	.10
		CR	.003	MO	0	VA	0
		CO	.003	NI	0	ZN	.003
		COND	570.	NO3	.04	PH	7.76
5	09/10/79	ALK	198.	CU	.009	PO4	.07
		AL	.06	CN	0	K	6.48
		NH3	0	F	.92	RESO	
		AS	.004	ALFA	2.	SE	0
		BA	.06	BETA	10.	SIO2	34.
		BE		OH		AG	0
		HCO3	241.5	FE	.04	SAR	1.129
		B		PB	0	NA	46
		CD	0	LI	.058	SO4	68.
		CA	78.40	MG	28.80	SURF	0
		CO3		MN	.006	TDS	359.
		CL	34.	HG	0	KJEL	.10
		CR	.007	MO		VA	0
		CO	.025	NI	0	ZN	.015
		COND	550.	NO3	.54	PH	7.40
6	04/28/80	ALK	190.	CU	0	PO4	.20
		AL	.05	CN	.002	K	6.30
		NH3	0	F	.99	RESO	
		AS	0	ALFA	2.4	SE	0
		BA	.265	BETA	10.	SIO2	33.50
		BE	0	OH		AG	0
		HCO3	231.8	FE	.02	SAR	1.174
		B	.13	PB	0	NA	38.80
		CD	0	LI	.057	SO4	54.
		CA	59.20	MG	14.40	SURF	0
		CO3		MN	0	TDS	460.
		CL	36.	HG	0	KJEL	0
		CR	0	MO	0	VA	.002
		CO	.003	NI	0	ZN	0
		COND	700.	NO3	0	PH	7.30

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

7	07/23/80	ALK	206.	CU	.01	PO4	.49
		AL	0	CN	0	K	5.90
		NH3	0	F	.81	RESO	
		AS	.003	ALFA	0	SE	0
		BA	.08	BETA	0	SIO2	33.90
		BE	0	OH		AG	0
		HCO3	231.3	FE	.12	SAR	1.277
		B	.10	PB	0	NA	43
		CD	.002	LI	.058	SO4	66.
		CA	56.	MG	18.24	SURF	0
		CO3		MN	.011	TDS	350.
		CL	32.	HG	0	KJEL	0
		CR	.004	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	540.	NO3	.62	PH	7.90
8	12/10/80	ALK	210.	CU	.01	PO4	.06
		AL	0	CN	0	K	5.30
		NH3	0	F	.64	RESO	
		AS	.003	ALFA	2.	SE	0
		BA	.075	BETA	12.	SIO2	33.
		BE	0	OH		AG	0
		HCO3	256.2	FE	.02	SAR	1.271
		B	.13	PB	0	NA	43
		CD	0	LI	.057	SO4	56.
		CA	61.60	MG	15.36	SURF	0
		CO3		MN	0	TDS	320.
		CL	27.50	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	.004	NI	0	ZN	.005
		COND	490.	NO3	.92	PH	7.30
9	03/23/81	ALK	204.	CU	0	PO4	.28
		AL	.04	CN	0	K	6.60
		NH3	0	F	1.02	RESO	
		AS	.003	ALFA	0	SE	0
		BA	.085	BETA	1.5	SIO2	32.
		BE	0	OH		AG	0
		HCO3	248.8	FE	.01	SAR	1.30
		B	.11	PB	.001	NA	44.80
		CD	.001	LI	.06	SO4	65.
		CA	69.60	MG	12.48	SURF	0
		CO3		MN	.007	TDS	357.
		CL	37.40	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	550.	NO3	1.17	PH	7.80

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	P04	K	RESD	SE	SI02	AG	SAR	NA	SO4	SURF	TDS	KJEL	VA	ZN	PH
10	10/20/81	204.6	.033	.27	.004	.09	0	249.6	.116	0	60.	0	38.10	0	0	500.	.002	0	.94	0	0	0	.015	.002	.08	21.60	.01	0	0	0	.42	.20	6.30	-0.678	0	39.60	0	1.216	43.20	76.	0	380.	.50	0	.009	7.80
11	03/10/82	190.4	0	.08	.004	.075	0	232.2	.105	0	59.	0	32.30	0	0	480.	.01	.01	.86	0	0	0	.005	0	0	16.	0	0	0	.71	.07	6.10	-0.450	0	34.50	0	1.326	31	51.	0	315.	.13	0	.005	7.40	
12	05/17/82	169.2	0	.60	.006	.07	0	206.4	.095	0	60.	0	32.50	.001	0	560.	0	.007	.95	1.9	2.	0	.005	.002	0	17.50	.001	0	0	.015	.89	.19	5.50	-1.048	0	33.70	0	1.30	44.50	100.	0	371.	.75	0	.011	7.90

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

13	08/26/82	ALK	188.	CU	0	P04	.26
		AL	0	CN	0	K	6.60
		NH3	1.29	F	1.	RESO	-0.500
		AS	.003	ALFA	2.	SE	0
		BA	.08	BETA	2.1	SI02	37.43
		BE	0	OH	0	AG	0
		HCO3	229.	FE	.02	SAR	1.312
		B	.11	PB	0	NA	44
		CD	0	LI	.059	S04	90.
		CA	58.40	MG	16.32	SURF	0
		CO3	0	MN	0	TDS	358.
		CL	30.50	HG	0	KJEL	1.40
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.004
		COND	550.	NO3	.54	PH	7.80
14	12/08/82	ALK	188.7	CU	0	P04	.20
		AL	0	CN	0	K	6.30
		NH3	.28	F	.94	RESO	.402
		AS	.004	ALFA		SE	0
		BA	.07	BETA		SI02	31.50
		BE	0	OH	0	AG	0
		HCO3	230.2	FE	.01	SAR	1.294
		B	.10	PB	0	NA	43
		CD	0	LI	.057	S04	84.
		CA	57.60	MG	15.84	SURF	0
		CO3	0	MN	0	TDS	350.
		CL	27.40	HG	.0002	KJEL	.46
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.023
		COND	540.	NO3	1.08	PH	7.70
15	02/22/83	ALK	192.6	CU	0	P04	.24
		AL	0	CN	0	K	6.30
		NH3	.10	F	.99	RESO	-0.126
		AS	.005	ALFA	2.	SE	0
		BA	.10	BETA	1.4	SI02	31.50
		BE	0	OH	0	AG	0
		HCO3	234.9	FE	.01	SAR	1.341
		B	.10	PB	0	NA	43.50
		CD	0	LI	.055	S04	72.
		CA	54.40	MG	15.36	SURF	0
		CO3	0	MN	.004	TDS	345.
		CL	26.80	HG	0	KJEL	.22
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.003
		COND	530.	NO3	.84	PH	7.50

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

16	05/27/83	ALK	188.	CU	0	P04	.12
		AL	.46	CN	.02	K	6.40
		NH3	.11	F	.94	RESO	-0.336
		AS	.004	ALFA	0	SE	0
		BA	.08	BETA	12.3	SI02	31.20
		BE	0	OH	0	AG	0
		HCO3	229.4	FE	.01	SAR	1.367
		B	.12	PB	0	NA	45
		CD	0	LI	.057	SO4	80.
		CA	57.60	MG	14.88	SURF	0
		CO3	0	MN	.001	TDS	365.
		CL	32.	HG	.0002	KJEL	.12
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.002
		COND	550.	NO3	.08	PH	7.80

17	08/17/83	ALK	204.	CU	.005	P04	.15
		AL	0	CN	.004	K	6.50
		NH3	.30	F	.97	RESO	.092
		AS	.003	ALFA	0	SE	0
		BA	.088	BETA	1.4	SI02	31.50
		BE	0	OH	0	AG	0
		HCO3	248.8	FE	.01	SAR	1.746
		B	.14	PB	0	NA	58
		CD	0	LI	.045	SO4	74.
		CA	48.	MG	21.60	SURF	0
		CO3	0	MN	.003	TDS	388.
		CL	50.	HG	0	KJEL	.75
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.004
		COND	590.	NO3	.10	PH	7.60

18	11/08/83	ALK	170.	CU	.004	P04	.14
		AL	.016	CN	.005	K	5.40
		NH3	.25	F	.92	RESO	-0.605
		AS	.005	ALFA	0	SE	0
		BA	.065	BETA	2.4	SI02	32.10
		BE	0	OH	0	AG	0
		HCO3	207.4	FE	.018	SAR	1.211
		B	.10	PB	0	NA	39.40
		CD	0	LI	.05	SO4	75.
		CA	46.	MG	20.80	SURF	0
		CO3	0	MN	.005	TDS	380.
		CL	30.	HG	0	KJEL	.40
		CR	.003	MO	0	VA	.01
		CO	0	NI	0	ZN	.003
		COND	510.	NO3	.10	PH	7.60

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

19	03/22/84	ALK	189.	CU	0	PO4	.10
		AL	0	CN	0	K	5.40
		NH3	0	F	.87	RESO	2.054
		AS	.003	ALFA	0	SE	0
		BA	.06	BETA	0	SI02	32.40
		BE	0	OH	0	AG	0
		HCO3	230.5	FE	.01	SAR	.95
		B	.10	PB	.10	NA	39
		CD	0	LI	.06	SO4	150.
		CA	54.	MG	44.16	SURF	0
		CO3	0	MN	.01	TDS	450.
		CL	40.	HG	0	KJEL	.30
		CR	.002	MO	0	VA	.03
		CO	0	NI	0	ZN	0
		COND	690.	NO3	.94	PH	7.70
20	08/15/84	ALK	189.	CU	0	PO4	.08
		AL	0	CN	0	K	5.85
		NH3	.21	F	.93	RESO	-1.885
		AS	.005	ALFA	0	SE	0
		BA	.08	BETA	0	SI02	30.30
		BE	0	OH	0	AG	0
		HCO3	230.6	FE	.02	SAR	1.473
		B	.152	PB	.125	NA	57
		CD	0	LI	.055	SO4	130.
		CA	76.	MG	22.80	SURF	0
		CO3	0	MN	0	TDS	560.
		CL	60.	HG	0	KJEL	.33
		CR	0	MO	.05	VA	.018
		CO	0	NI	.01	ZN	.007
		COND	850.	NO3	.99	PH	7.90
21	11/12/84	ALK	178.	CU	0	PO4	1.02
		AL	0	CN	0	K	6.02
		NH3	.25	F	.84	RESO	-0.420
		AS	.003	ALFA	0	SE	0
		BA	.08	BETA	6.	SI02	37.25
		BE	0	OH	0	AG	0
		HCO3	217.2	FE	.02	SAR	1.573
		B	.116	PB	.033	NA	51
		CD	0	LI	.059	SO4	65.
		CA	70.40	MG	5.70	SURF	0
		CO3	0	MN	0	TDS	370.
		CL	50.	HG	0	KJEL	.35
		CR	0	MO	.01	VA	.011
		CO	0	NI	0	ZN	.005
		COND	570.	NO3	1.	PH	8.08

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

22	02/25/85	ALK	183.	CU	0	PO4	.04
		AL	0	CN	0	K	6.20
		NH3	0	F	.92	RESO	-2.127
		AS	.003	ALFA	0	SE	0
		BA	.08	BETA	0	SI02	36.96
		BE	0	OH	0	AG	0
		HCO3	223.	FE	0	SAR	1.155
		B	.13	PB	0	NA	41.80
		CD	0	LI	.06	SO4	108.
		CA	68.60	MG	18.60	SURF	0
		CO3	0	MN	0	TDS	395.
		CL	33.	HG	0	KJEL	.10
		CR	0	MO	.03	VA	0
		CO	0	NI	0	ZN	.003
		COND	600.	NO3	1.	PH	7.50
23	06/17/85	ALK	182.	CU	0	PO4	.23
		AL	.21	CN	0	K	6.30
		NH3	0	F	.87	RESO	-0.461
		AS	0	ALFA	0	SE	0
		BA	.08	BETA	7.	SI02	32.01
		BE	0	OH	0	AG	0
		HCO3	222.	FE	0.	SAR	1.185
		B	.17	PB	.004	NA	39
		CD	0	LI	.057	SO4	67.
		CA	61.60	MG	12.50	SURF	0
		CO3	0	MN	0	TDS	376.
		CL	34.90	HG	0	KJEL	0
		CR	0	MO	.01	VA	.003
		CO	0	NI	0	ZN	0
		COND	563.	NO3	5.40	PH	7.85
24	08/19/85	ALK	182.	CU	0	PO4	.06
		AL	0	CN	0	K	4.30
		NH3	.10	F	.99	RESO	-33.800
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	4.	SI02	32.19
		BE	0	OH	0	AG	0
		HCO3	222.	FE	.03	SAR	1.357
		B	.14	PB	.005	NA	44
		CD	0	LI	.052	SO4	69.
		CA	57.60	MG	13.44	SURF	0
		CO3	0	MN	0	TDS	360.
		CL	35.20	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.017
		COND	550.	NO3	1.09	PH	7.80

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

25	11/19/85	ALK	141.	CU	0	PO4	0
		AL	.02	CN	0	K	5.20
		NH3	0	F	.98	RESO	-1.141
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	4.	SI02	31.15
		BE	0	OH	0	AG	0
		HCO3	172.	FE	0	SAR	1.215
		B	.11	PB	0	NA	39.30
		CD	0	LI	.052	SO4	95.
		CA	56.	MG	14.20	SURF	0
		CO3	0	MN	0	TDS	348.
		CL	31.50	HG	0	KJEL	0
		CR	0	MO	0	VA	.007
		CO	0	NI	0	ZN	0
		COND	518.	NO3	1.01	PH	7.75
26	02/19/86	ALK	179.	CU	0	PO4	.08
		AL	0	CN	0	K	5.37
		NH3	.42	F	.96	RESO	-4.280
		AS	.003	ALFA	4.	SE	0
		BA	.07	BETA	6.	SI02	30.86
		BE	0	OH	0	AG	0
		HCO3	218.	FE	0.	SAR	1.248
		B	.17	PB	.003	NA	40.60
		CD	0	LI	.052	SO4	63.
		CA	61.60	MG	11.30	SURF	0
		CO3	0	MN	.02	TDS	358.
		CL	34.30	HG	0	KJEL	.65
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	574.	NO3	1.27	PH	8.08
27	05/20/86	ALK	179.	CU	0	PO4	.18
		AL	0	CN	0	K	5.24
		NH3	.14	F	.94	RESO	-0.480
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	5.	SI02	35.40
		BE	0	OH	0	AG	0
		HCO3	218.	FE	0	SAR	1.222
		B	.12	PB	0	NA	40
		CD	0	LI	.05	SO4	63.
		CA	57.20	MG	14.60	SURF	0
		CO3	0	MN	0	TDS	289.
		CL	33.20	HG	0	KJEL	.20
		CR	0	MO	0	VA	0
		CO	0	NI	.05	ZN	0
		COND	435.	NO3	1.15	PH	8.00

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

28	07/07/86	ALK	188.	CU	.02	PO4	.15
		AL	.12	CN	.005	K	5.73
		NH3	.04	F	.87	RESO	-0.379
		AS	0	ALFA	0	SE	0
		BA	.08	BETA	0	SIO2	30.12
		BE	0	OH	0	AG	0
		HCO3	229.4	FE	.10	SAR	1.436
		B	.15	PB	0	NA	47.50
		CD	0	LI	.052	SO4	73.
		CA	57.60	MG	15.40	SURF	0
		CO3	0	MN	0	TDS	352.
		CL	42.20	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	.009	NI	0	ZN	.03
		COND	550.	NO3	1.06	PH	7.90
29	11/06/86	ALK	170.	CU	0	PO4	.08
		AL	0	CN	0	K	5.95
		NH3	0	F	.86	RESO	-0.455
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	4.	SIO2	29.30
		BE	0	OH	0	AG	0
		HCO3	207.4	FE	0	SAR	1.207
		B	.15	PB	0	NA	38.53
		CD	0	LI	.062	SO4	62.
		CA	55.20	MG	13.40	SURF	0
		CO3	0	MN	0	TDS	345.
		CL	38.90	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.007
		COND	500.	NO3	1.55	PH	8.40
30	03/03/87	ALK	182.	CU	0	PO4	.17
		AL	0	CN	0	K	6.07
		NH3	.17	F	1.02	RESO	-0.575
		AS	0	ALFA	10.	SE	0
		BA	.07	BETA	7.	SIO2	31.05
		BE	0	OH	0	AG	0
		HCO3	222.	FE	0	SAR	1.211
		B	.13	PB	0	NA	40.41
		CD	.002	LI	.05	SO4	68.
		CA	68.	MG	10.	SURF	0
		CO3	0	MN	0	TDS	356.
		CL	35.	HG	0	KJEL	.20
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	530.	NO3	1.20	PH	8.00

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

31	05/06/87	ALK	182.	CU	0	PO4	.13
		AL	0	CN	0	K	6.45
		NH3	0	F	.89	RESO	-0.421
		AS	0	ALFA	0	SE	0
		BA	.08	BETA	0	SI02	29.91
		BE	0	OH	0	AG	0
		HCO3	222.	FE	0	SAR	1.359
		B	.14	PB	0	NA	44.56
		CD	0	LI	.051	SD4	72.
		CA	72.	MG	5.70	SURF	0
		CO3	0	MN	0	TDS	355.
		CL	32.60	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	550.	NO3	1.01	PH	7.80
32	08/19/87	ALK	183.	CU	0	PO4	.09
		AL	0	CN	0	K	5.32
		NH3	.06	F	1.01	RESO	.003
		AS	.003	ALFA	0	SE	0
		BA	.06	BETA	0	SI02	32.75
		BE	0	OH	0	AG	0
		HCO3	223.	FE	.03	SAR	1.545
		B	.08	PB	0	NA	48
		CD	0	LI	.05	SD4	65.
		CA	48.01	MG	15.29	SURF	0
		CO3	0	MN	0	TDS	331.
		CL	33.20	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	550.	NO3	1.37	PH	7.40
33	11/13/87	ALK	248.	CU	0	PO4	.69
		AL	0	CN	0	K	8.66
		NH3	.09	F	.71	RESO	-1.605
		AS	.012	ALFA	0	SE	0
		BA	.10	BETA	7.	SI02	38.47
		BE	0	OH	0	AG	0
		HCO3	303.	FE	0	SAR	1.504
		B	.13	PB	0	NA	62.70
		CD	0	LI	.06	SD4	155.
		CA	88.36	MG	26.32	SURF	0
		CO3	0	MN	0	TDS	540.
		CL	43.50	HG	0	KJEL	.12
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	828.	NO3	1.25	PH	7.60

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

34	03/16/88	ALK	182.	CU	0	PO4	.14
		AL	0	CN	0	K	5.94
		NH3	.08	F	1.06	RESO	-1.381
		AS	.005	ALFA	0	SE	0
		BA	.06	BETA	8.	SI02	35.24
		BE	0	OH	0	AG	0
		HCO3	222.	FE	.12	SAR	1.331
		B	.11	PB	0	NA	48.50
		CD	0	LI	.06	SO4	120.
		CA	72.80	MG	16.89	SURF	0
		CO3	0	MN	0	TDS	420.
		CL	36.30	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	630.	NO3	1.19	PH	7.60
35	06/07/88	ALK	170.	CU	0	PO4	.10
		AL	0	CN	0	K	5.88
		NH3	0	F	.94	RESO	.477
		AS	.005	ALFA	0	SE	0
		BA	.07	BETA	4.	SI02	36.29
		BE	0	OH	0	AG	0
		HCO3	207.	FE	0	SAR	1.221
		B	.11	PB	0	NA	39.05
		CD	0	LI	.05	SO4	66.
		CA	77.60	MG	0	SURF	0
		CO3	0	MN	0	TDS	345.
		CL	35.40	HG	0	KJEL	0
		CR	0	MO	0	VA	.02
		CO	0	NI	0	ZN	0
		COND	530.	NO3	3.20	PH	7.80
36	10/07/88	ALK	180.	CU	0	PO4	.09
		AL	0	CN	0	K	6.05
		NH3	0	F	.88	RESO	-0.777
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	0	SI02	33.43
		BE	.002	OH	0	AG	0
		HCO3	220.	FE	0	SAR	1.122
		B	.10	PB	0	NA	38.18
		CD	0	LI	.06	SO4	64.
		CA	77.60	MG	6.24	SURF	0
		CO3	0	MN	0	TDS	348.
		CL	40.	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	550.	NO3	.99	PH	8.10

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
37	03/23/89	ALK	180.	CU	0	PO4	.19				
		AL	0	CN	0	K	6.31				
		NH3	.09	F	1.03	RESO	-0.776				
		AS	0	ALFA	0	SE	0				
		BA	.07	BETA	0	SIO2	34.73				
		BE	0	OH	0	AG	0				
		HCO3	220.	FE	0	SAR	1.143				
		B	.10	PB	0	NA	68.93				
		CD	0	LI	.06	SO4	67.				
		CA	73.60	MG	8.64	SURF	0				
		CO3	0	MN	0	TDS	388.				
		CL	41.	HG	0	KJEL	1.10				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	0				
		COND	600.	NO3	1.20	PH	7.45				
		38	05/15/89	ALK	188.	CU	0	PO4	.12		
				AL	0	CN	0	K	6.79		
NH3	.04			F	1.08	RESO	-0.463				
AS	0			ALFA	0	SE	0				
BA	.08			BETA	0	SIO2	33.94				
BE	0			OH	0	AG	0				
HCO3	229.			FE	0.	SAR	1.314				
B	.10			PB	0	NA	43.89				
CD	0			LI	.06	SO4	71.				
CA	55.63			MG	17.55	SURF	0				
CO3	0			MN	0	TDS	355.				
CL	35.			HG	0	KJEL	.06				
CR	0			MO	0	VA	.02				
CO	0			NI	0	ZN	0				
COND	560.			NO3	1.29	PH	7.80				
39	09/11/89			ALK		CU	0	PO4	.44		
				AL	0	CN	0	K	5.98		
		NH3	.09	F	.95	RESO	-7.060				
		AS	0	ALFA	0	SE	0				
		BA	.06	BETA	5.	SIO2	34.50				
		BE	0	OH		AG	0				
		HCO3	220.	FE	0	SAR	.72				
		B	.12	PB	0	NA	40.86				
		CD	0	LI	.06	SO4					
		CA	51.28	MG	16.48	SURF	0				
		CO3		MN	0	TDS	340.				
		CL	34.10	HG	0	KJEL					
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	0				
		COND		NO3	1.20	PH					

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

40	10/11/89	ALK	176.	CU	0	PO4	.11
		AL	0	CN	0	K	6.20
		NH3	0	F	1.03	RESO	-0.490
		AS	.004	ALFA	0	SE	0
		BA	.07	BETA	3.	SI02	36.17
		BE	0	OH	0	AG	0
		HCO3	215.	FE	0	SAR	1.23
		B	.09	PB	0	NA	40.09
		CD	0	LI	.061	SO4	63.
		CA	52.81	MG	16.82	SURF	0
		CO3	0	MN	0	TDS	321.
		CL	33.50	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	495.	NO3	1.16	PH	7.30
41	03/26/90	ALK	184.	CU	0	PO4	.11
		AL	0	CN	0	K	6.07
		NH3	.09	F	.81	RESO	-0.393
		AS	.005	ALFA	0	SE	0
		BA	.07	BETA	6.	SI02	31.74
		BE	0	OH	0	AG	0
		HCO3	224.	FE	0	SAR	1.265
		B	.07	PB	0	NA	41.47
		CD	0	LI	.06	SO4	57.
		CA	54.60	MG	16.32	SURF	0
		CO3	0	MN	0	TDS	330.
		CL	35.80	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	475.	NO3	1.10	PH	7.80
42	07/05/90	ALK	187.	CU	0	PO4	.24
		AL	0	CN	0	K	5.67
		NH3	.13	F	.95	RESO	-0.418
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	6.	SI02	33.73
		BE	0	OH	0	AG	0
		HCO3	228.	FE	0	SAR	1.276
		B	.09	PB	0	NA	42.29
		CD	0	LI	.05	SO4	80.
		CA	54.62	MG	17.40	SURF	0
		CO3	0	MN	0	TDS	440.
		CL	37.70	HG	0	KJEL	1.14
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	446.	NO3	1.18	PH	7.50

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

CASE MO-DA-YR

43	10/18/90	ALK	180.	CU	.03	PO4	.20
		AL	.11	CN	0	K	6.42
		NH3	.04	F	1.04	RESO	-0.167
		AS	.009	ALFA	0	SE	0
		BA	.071	BETA	0	SIO2	41.40
		BE	0	OH	0	AG	0
		HCO3	220.	FE	.07	SAR	2.25
		B	.04	PB	.003	NA	53.11
		CD	0	LI	.07	SO4	66.
		CA	50.20	MG	15.44	SURF	0
		CO3	0	MN	0	TDS	394.
		CL	33.40	HG	0	KJEL	.21
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.04
		COND	432.	NO3	1.19	PH	7.70

J R SIMPLOT - POCATELLO

WELL #5 - CHEMICAL ANALYSES

AVERAGES 02/23/78 TO 01/09/91

ALK	186.5	CU	.003	PO4	.176
AL	.03	CN	.001	K	6.069
NH3	.124	F	.937	RESO	-22.132
AS	.003	ALFA	1.2	SE	.00
BA	.08	BETA	4.2	SI02	33.761
BE	.00	OH	0	AG	0
HCO3	226.6	FE	.019	SAR	1.294
B	.117	PB	.007	NA	44.31
CD	.00	LI	.051	S04	78.
CA	61.198	MG	16.764	SURF	0
CO3	0	MN	.003	TDS	372.
CL	36.05	HG	0.00	KJEL	.249
CR	.001	MO	.003	VA	.006
CO	.002	NI	.002	ZN	.007
COND	557.	NO3	1.049	PH	7.70

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

3	05/03/78	ALK	420.	CU	.005	P04	.04
		AL	.05	CN	0	K	17.09
		NH3	.15	F	.66	RESO	
		AS	0	ALFA	5.	SE	.003
		BA	.10	BETA	18.	SI02	45.
		BE		OH		AG	.002
		HCO3		FE	.038	SAR	1.817
		B	.30	PB	.006	NA	110
		CD	0	LI	.01	SO4	400.
		CA	188.	MG	54.72	SURF	0
		CO3		MN	.011	TDS	1169.
		CL	84.	HG	0	KJEL	2.
		CR	0	MO		VA	0
		CO	.003	NI	0	ZN	.03
		COND	1790.	NO3	1.82	PH	7.11
4	10/13/78	ALK	406.	CU	.008	P04	.05
		AL	.05	CN	0	K	12.16
		NH3	0	F	.76	RESO	
		AS	0	ALFA	4.	SE	0
		BA	.09	BETA	10.	SI02	37.75
		BE		OH		AG	0
		HCO3		FE	.044	SAR	2.501
		B	.25	PB	0	NA	120.70
		CD	0	LI	.013	SO4	270.
		CA	168.	MG	5.30	SURF	0
		CO3		MN	.012	TDS	890.
		CL	64.	HG	0	KJEL	0
		CR	0	MO		VA	.09
		CO	.005	NI	.021	ZN	.013
		COND	1365.	NO3	1.54	PH	7.11
5	06/01/79	ALK	260.	CU	.002	P04	0
		AL	0	CN	0	K	7.78
		NH3	0	F	.87	RESO	
		AS	.003	ALFA	2.5	SE	.002
		BA	.09	BETA	10.	SI02	40.
		BE	0	OH		AG	0
		HCO3		FE	0	SAR	1.286
		B	.16	PB	0	NA	53.20
		CD	0	LI	.068	SO4	130.
		CA	90.40	MG	24.	SURF	0
		CO3		MN	.003	TDS	500.
		CL	38.	HG	0	KJEL	.15
		CR	.002	MO	0	VA	0
		CO	.004	NI	0	ZN	.003
		COND	770.	NO3	.02	PH	7.75

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

6	09/10/79	ALK	412.	CU	.01	P04	.08
		AL	.06	CN	0	K	11.90
		NH3	0	F	.67	RESO	
		AS	0	ALFA	3.	SE	.003
		BA	.06	BETA	13.	SIO2	41.
		BE		OH		AG	0
		HCO3	502.6	FE	.04	SAR	1.951
		B	.23	PB	0	NA	108
		CD	0	LI	.096	SO4	320.
		CA	214.40	MG	11.04	SURF	0
		CO3		MN	.006	TDS	985.
		CL	64.	HG	0	KJEL	.10
		CR	.002	MO		VA	0
		CO	.038	NI	0	ZN	.019
		COND	1500.	NO3	1.36	PH	7.90
7	04/28/80	ALK	532.	CU	.01	P04	.10
		AL	.14	CN	.003	K	15.50
		NH3	0	F	.63	RESO	
		AS	0	ALFA	2.6	SE	0
		BA	.21	BETA	10.6	SIO2	44.50
		BE	0	OH		AG	0
		HCO3	649.	FE	.02	SAR	1.885
		B	.29	PB	0	NA	120
		CD	0	LI	.114	SO4	380.
		CA	188.80	MG	72.	SURF	0
		CO3		MN	.01	TDS	1180.
		CL	82.	HG	0	KJEL	0
		CR	0	MO	.002	VA	.005
		CO	.008	NI	.039	ZN	0
		COND	1800.	NO3	0	PH	7.20
8	07/23/80	ALK	302.	CU	.01	P04	.52
		AL	0	CN	0	K	7.70
		NH3	0	F	.39	RESO	
		AS	.002	ALFA	0	SE	0
		BA	.07	BETA	0	SIO2	36.10
		BE	0	OH		AG	0
		HCO3	368.4	FE	.12	SAR	1.624
		B	.13	PB	0	NA	75
		CD	.005	LI	.076	SO4	204.
		CA	111.20	MG	30.72	SURF	0
		CO3		MN	.01	TDS	660.
		CL	46.	HG	0	KJEL	0
		CR	.007	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	1000.	NO3	.88	PH	7.70

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

9	12/10/80	ALK	314.	CU	.01	PO4	.05
		AL	0	CN	0	K	18.50
		NH3	0	F	.47	RESO	
		AS	.003	ALFA	1.3	SE	0
		BA	.075	BETA	9.6	SI02	34.50
		BE	0	OH		AG	0
		HCO3	383.	FE	.02	SAR	1.558
		B	.205	PB	0	NA	70
		CD	0	LI	.072	SO4	165.
		CA	112.	MG	24.96	SURF	0
		CO3		MN	0	TDS	610.
		CL	41.60	HG	0	KJEL	.20
		CR	0	MO	0	VA	0
		CO	.01	NI	0	ZN	.005
		COND	930.	NO3	1.24	PH	7.10
10	03/23/81	ALK	296.	CU	0	PO4	.33
		AL	.11	CN	0	K	8.30
		NH3	.10	F	.89	RESO	
		AS	.002	ALFA	1.1	SE	.002
		BA	.08	BETA	0	SI02	36.
		BE	0	OH		AG	0
		HCO3	361.1	FE	.10	SAR	1.501
		B	.15	PB	.002	NA	69.50
		CD	0	LI	.075	SO4	185.
		CA	116.	MG	28.32	SURF	0
		CO3		MN		TDS	635.
		CL	52.40	HG	.0003	KJEL	.18
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	970.	NO3	1.28	PH	7.70
11	10/20/81	ALK	320.	CU	0	PO4	.20
		AL	.065	CN	.008	K	8.50
		NH3	.06	F	.73	RESO	-1.348
		AS	.003	ALFA	1.3	SE	0
		BA	.089	BETA	0	SI02	43.10
		BE	0	OH	0	AG	0
		HCO3	390.1	FE	.11	SAR	1.767
		B	.16	PB	.003	NA	80
		CD	0	LI	.085	SO4	204.
		CA	96.	MG	36.	SURF	0
		CO3	0	MN	.009	TDS	665.
		CL	30.40	HG	0	KJEL	.30
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.011
		COND	720.	NO3	.47	PH	7.60

J R SIMPLOT - POCA TELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

12	03/10/82	ALK	524.	CU	.01	P04	.09
		AL	0	CN	.02	K	5.40
		NH3	.13	F	.71	RESO	-9.330
		AS	.004	ALFA	0	SE	.003
		BA	.07	BETA	0	SI02	28.50
		BE	0	OH	0	AG	0
		HCO3	639.3	FE	.03	SAR	2.418
		B	.20	PB	0	NA	175
		CD	0	LI	.016	SO4	680.
		CA	290.	MG	65.	SURF	.12
		CO3	0	MN	0	TDS	1650.
		CL	97.10	HG	0	KJEL	.15
		CR	.003	MO	.005	VA	.02
		CO	.005	NI	0	ZN	.006
		COND	2500.	NO3	2.59	PH	7.00

13	05/13/82	ALK	541.2	CU	.01	P04	.17
		AL	0	CN	.012	K	6.10
		NH3	.61	F	.74	RESO	-3.576
		AS	.004	ALFA	1.5	SE	.005
		BA	.07	BETA	1.8	SI02	58.20
		BE	0	OH	0	AG	0
		HCO3	660.3	FE	.051	SAR	2.674
		B	.225	PB	0	NA	165
		CD	0	LI	.03	SO4	390.
		CA	184.	MG	63.50	SURF	0
		CO3	0	MN	.005	TDS	1250.
		CL	92.70	HG	0	KJEL	.70
		CR	.005	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	1890.	NO3	2.82	PH	7.30

14	08/26/82	ALK	278.	CU	.01	P04	.17
		AL	0	CN	.005	K	8.40
		NH3	1.41	F	.83	RESO	-2.673
		AS	.002	ALFA	1.6	SE	.002
		BA	.085	BETA	1.9	SI02	40.76
		BE	0	OH	0	AG	0
		HCO3	339.	FE	.02	SAR	4.052
		B	.15	PB	0	NA	189
		CD	0	LI	.077	SO4	480.
		CA	110.40	MG	33.12	SURF	0
		CO3	0	MN	.003	TDS	1025.
		CL	43.50	HG	0.00	KJEL	1.65
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.003
		COND	1570.	NO3	.80	PH	7.50

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

15	12/08/82	ALK	269.6	CU	.01	P04	.16
		AL	0	CN	.008	K	8.20
		NH3	.03	F	.80	RESO	2.519
		AS	.003	ALFA		SE	0
		BA	.075	BETA		SI02	35.
		BE	0	OH	0	AG	0
		HCO3	328.9	FE	.03	SAR	1.563
		B	.15	PB	0	NA	71.50
		CD	0	LI	.073	SO4	228.
		CA	101.60	MG	34.56	SURF	0
		CO3	0	MN	.002	TDS	651.
		CL	44.	HG	0	KJEL	.20
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.007
		COND	990.	NO3	1.45	PH	7.40
16	02/22/83	ALK	289.4	CU	0	P04	.28
		AL	0	CN	0	K	8.10
		NH3	.08	F	.85	RESO	-1.407
		AS	.003	ALFA	1.8	SE	0
		BA	.10	BETA	1.3	SI02	34.50
		BE	0	OH	0	AG	0
		HCO3	353.1	FE	.06	SAR	1.582
		B	.14	PB	0	NA	69
		CD	0	LI	.07	SO4	174.
		CA	96.	MG	29.28	SURF	0
		CO3	1.	MN	.005	TDS	594.
		CL	39.50	HG	0	KJEL	.18
		CR	.001	MO	0	VA	0
		CO	0	NI	0	ZN	.004
		COND	900.	NO3	1.20	PH	7.50
17	05/27/83	ALK	276.	CU	0	P04	.12
		AL	.75	CN	.008	K	8.50
		NH3	.50	F	.82	RESO	-1.718
		AS	.004	ALFA	0	SE	0
		BA	.07	BETA	1.1	SI02	34.90
		BE	0	OH	0	AG	0
		HCO3	336.7	FE	.04	SAR	1.646
		B	.14	PB	0	NA	72
		CD	0	LI	.072	SO4	180.
		CA	100.	MG	27.36	SURF	0
		CO3	0	MN	.003	TDS	618.
		CL	52.	HG	0	KJEL	.22
		CR	.002	MO	.01	VA	0
		CO	0	NI	0	ZN	.002
		COND	920.	NO3	.16	PH	7.40

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

18	08/17/83	ALK	294.	CU	.01	PO4	.13
		AL	0	CN	.012	K	8.20
		NH3	.60	F	.81	RESO	1.675
		AS	.003	ALFA	0	SE	0
		BA	.069	BETA	1.1	SI02	33.80
		BE	0	OH	0	AG	0
		HCO3	358.6	FE	.036	SAR	1.678
		B	.15	PB	.002	NA	75
		CD	0	LI	.06	SO4	182.
		CA	100.	MG	31.20	SURF	0
		CO3	0	MN	.018	TDS	636.
		CL	50.	HG	.0002	KJEL	1.10
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.005
		COND	970.	NO3	.15	PH	7.80
19	11/08/83	ALK	268.	CU	.01	PO4	.12
		AL	.005	CN	.015	K	7.20
		NH3	.30	F	.81	RESO	-2.193
		AS	.003	ALFA	0	SE	0
		BA	.07	BETA	1.9	SI02	33.10
		BE	0	OH	0	AG	0
		HCO3	326.9	FE	.044	SAR	1.43
		B	.16	PB	0	NA	63.90
		CD	0	LI	.07	SO4	172.
		CA	98.	MG	32.40	SURF	0
		CO3	0	MN	.02	TDS	680.
		CL	44.	HG	0	KJEL	.50
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.004
		COND	900.	NO3	.16	PH	7.80
20	03/22/84	ALK	422.	CU	0	PO4	.12
		AL	0	CN	0	K	18.30
		NH3	0	F	.85	RESO	.76
		AS	.003	ALFA	0	SE	0
		BA	.05	BETA	0	SI02	33.50
		BE	0	OH	0	AG	0
		HCO3	514.8	FE	0	SAR	3.60
		B	.20	PB	0	NA	178
		CD	0	LI	.12	SO4	334.
		CA	166.80	MG	10.80	SURF	0
		CO3	0	MN	.01	TDS	1065.
		CL	79.	HG	0	KJEL	.25
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1600.	NO3	1.84	PH	7.30

J R SIMPLOT - POCA TELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
21	08/15/84	ALK	288.	CU	.007	P04	.43				
		AL	0	CN	0	K	8.10				
		NH3	.22	F	.83	RESO	-1.700				
		AS	.006	ALFA	0	SE	0				
		BA	.08	BETA	4.	SI02	21.70				
		BE	0	OH	0	AG	0				
		HCO3	351.4	FE	.03	SAR	1.779				
		B	.191	PB	.07	NA	79				
		CD	0	LI	.07	S04	168.				
		CA	100.	MG	30.	SURF	0				
		CO3	0	MN	0	TDS	635.				
		CL	70.	HG	0	KJEL	.35				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	.007				
		COND	980.	NO3	1.30	PH	7.85				
		22	11/12/84	ALK	284.	CU	.005	P04	.64		
				AL	0	CN	0	K	8.40		
NH3	0			F	.69	RESO	-1.731				
AS	.006			ALFA	0	SE	0				
BA	.08			BETA	10.	SI02	21.				
BE	0			OH	0	AG	0				
HCO3	346.5			FE	.02	SAR	2.952				
B	.165			PB	.01	NA	67				
CD	0			LI	.077	S04	162.				
CA	124.			MG	14.90	SURF	0				
CO3	0			MN	0	TDS	595.				
CL	46.			HG	0	KJEL	.10				
CR	0			MO	.01	VA	.015				
CO	0			NI	0	ZN	.002				
COND	900.			NO3	1.23	PH	7.82				
23	02/25/85			ALK	286.	CU	0	P04	.10		
				AL	.002	CN	0	K	8.30		
		NH3	0	F	.83	RESO	-2.886				
		AS	.008	ALFA	0	SE	0				
		BA	.07	BETA	8.	SI02	41.51				
		BE	0	OH	0	AG	0				
		HCO3	349.	FE	.02	SAR	1.419				
		B	.17	PB	0	NA	67.70				
		CD	0	LI	.074	S04	220.				
		CA	122.10	MG	30.60	SURF	0				
		CO3	0	MN	0	TDS	660.				
		CL	45.	HG	0	KJEL	3.15				
		CR	.037	MO	0	VA	0				
		CO	0	NI	0	ZN	.005				
		COND	1010.	NO3	1.18	PH	7.00				

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

24	06/17/85	ALK	271.	CU	0	PO4	.46
		AL	.11	CN	0	K	8.50
		NH3	0	F	.75	RESO	-1.664
		AS	.015	ALFA	0	SE	0
		BA	.08	BETA	8.	SI02	35.99
		BE	0	OH	0	AG	0
		HCO3	330.6	FE	0	SAR	1.571
		B	.24	PB	.002	NA	68
		CD	0	LI	.071	SO4	169.
		CA	106.40	MG	21.60	SURF	0
		CO3	0	MN	0	TDS	642.
		CL	46.70	HG	0	KJEL	0
		CR	0	MO	0	VA	.005
		CO	0	NI	0	ZN	.006
		COND	900.	NO3	1.79	PH	7.80
25	08/19/85	ALK	281.	CU	0	PO4	.46
		AL	.02	CN	0	K	4.80
		NH3	.10	F	.83	RESO	-1.656
		AS	0	ALFA	6.	SE	0
		BA	.10	BETA	7.	SI02	36.48
		BE	0	OH	0	AG	0
		HCO3	343.	FE	0.	SAR	1.801
		B	.20	PB	0	NA	79
		CD	.007	LI	.061	SO4	190.
		CA	102.40	MG	26.40	SURF	0
		CO3	0	MN	0	TDS	640.
		CL	50.20	HG	0	KJEL	.14
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.018
		COND	970.	NO3	1.34	PH	7.85
26	11/19/85	ALK	289.	CU	.02	PO4	.42
		AL	0	CN	0	K	7.85
		NH3	.10	F	.84	RESO	-1.686
		AS	.003	ALFA	0	SE	0
		BA	.07	BETA	4.	SI02	34.94
		BE	0	OH	0	AG	0
		HCO3	352.	FE	.02	SAR	1.645
		B	.23	PB	0	NA	73
		CD	0	LI	.07	SO4	193.
		CA	104.80	MG	27.10	SURF	0
		CO3	0	MN	0	TDS	628.
		CL	44.90	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.005
		COND	950.	NO3	1.54	PH	7.80

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

27	02/19/86	ALK	283.	CU	0	PO4	.50
		AL	0	CN	0	K	7.73
		NH3	.60	F	.81	RESO	-1.751
		AS	.014	ALFA	0	SE	0
		BA	.07	BETA	7.	SI02	35.89
		BE	0	OH	0	AG	0
		HCO3	345.	FE	0	SAR	1.54
		B	.17	PB	0	NA	60
		CD	0	LI	.067	SO4	173.
		CA	113.20	MG	21.40	SURF	0
		CO3	0	MN	0	TDS	632.
		CL	44.30	HG	0	KJEL	.80
		CR	0	MO	0	VA	.004
		CO	0	NI	0	ZN	.023
		COND	971.	NO3	1.35	PH	8.04
28	05/20/86	ALK	402.	CU	0	PO4	.76
		AL	0	CN	0	K	12.37
		NH3	.19	F	.68	RESO	-3.660
		AS	0	ALFA	0	SE	0
		BA	.03	BETA	9.	SI02	42.04
		BE	0	OH	0	AG	0
		HCO3	490.	FE	0	SAR	1.673
		B	.22	PB	0	NA	93
		CD	0	LI	.08	SO4	327.
		CA	170.	MG	39.10	SURF	0
		CO3	0	MN	0	TDS	978.
		CL	56.70	HG	0	KJEL	.25
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1503.	NO3	1.80	PH	8.15
29	11/06/86	ALK	410.	CU	0	PO4	.97
		AL	0	CN	0	K	15.07
		NH3	.14	F	.58	RESO	-3.854
		AS	.004	ALFA	0	SE	0
		BA	.03	BETA	10.	SI02	41.14
		BE	0	OH	0	AG	0
		HCO3	500.2	FE	.04	SAR	1.865
		B	.22	PB	0	NA	105.29
		CD	.002	LI	.08	SO4	300.
		CA	169.60	MG	43.70	SURF	0
		CO3	0	MN	0	TDS	988.
		CL	82.	HG	0	KJEL	.18
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1500.	NO3	1.70	PH	8.20

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
30	03/03/87	ALK	412.	CU	0	P04	.88				
		AL	0	CN	0	K	14.94				
		NH3	.24	F	.74	RESO	-3.372				
		AS	.01	ALFA	13.	SE	0				
		BA	.04	BETA	8.	SI02	43.66				
		BE	0	OH	0	AG	0				
		HCO3	502.6	FE	0	SAR	1.967				
		B	.24	PB	0	NA	108.96				
		CD	0	LI	.08	SD4	343.				
		CA	168.	MG	39.30	SURF	0				
		CO3	0	MN	0	TDS	985.				
		CL	52.20	HG	0	KJEL	.29				
		CR	0	MO	.02	VA	0				
		CO	0	NI	0	ZN	0				
		COND	1490.	N03	1.67	PH	8.00				
		31	05/06/87	ALK	531.	CU	0	P04	1.15		
				AL	0	CN	0	K	17.62		
NH3	.18			F	.54	RESO	-6.792				
AS	.007			ALFA	15.	SE	0				
BA	.06			BETA	8.	SI02	44.15				
BE	0			OH	0	AG	0				
HCO3	648.			FE	0	SAR	2.206				
B	.29			PB	0	NA	149.67				
CD	0			LI	.103	SD4	536.				
CA	241.60			MG	65.20	SURF	0				
CO3	0			MN	0	TDS	1430.				
CL	85.80			HG	0	KJEL	.20				
CR	0			MO	0	VA	0				
CO	0			NI	0	ZN	0				
COND	2190.			N03	2.30	PH	7.80				
32	08/19/87			ALK	417.	CU	0	P04	1.32		
				AL	0	CN	0	K	11.70		
		NH3	.12	F	.64	RESO	-3.317				
		AS	.022	ALFA	0	SE	0				
		BA	.03	BETA	14.	SI02	44.15				
		BE	0	OH	0	AG	0				
		HCO3	509.	FE	0	SAR	2.071				
		B	.21	PB	0	NA	115				
		CD	0	LI	.08	SD4	346.				
		CA	163.30	MG	42.75	SURF	0				
		CO3	0	MN	0	TDS	998.				
		CL	62.40	HG	0	KJEL	.15				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	0				
		COND	1540.	N03	1.77	PH	7.00				

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

33	11/13/87	ALK	481.	CU	0	P04	1.18
		AL	0	CN	0	K	22.44
		NH3	.11	F	.51	RESO	-6.161
		AS	.005	ALFA	17.	SE	0
		BA	.07	BETA	17.	SI02	57.95
		BE	0	OH	0	AG	0
		HCO3	587.	FE	.04	SAR	2.199
		B	.25	PB	0	NA	142.04
		CD	0	LI	.11	SO4	490.
		CA	219.70	MG	58.66	SURF	0
		CO3	0	MN	.04	TDS	1335.
		CL	81.90	HG	0	KJEL	.18
		CR	0	MO	0	VA	.008
		CO	0	NI	0	ZN	0
		COND	2030.	NO3	1.53	PH	7.50
34	03/16/88	ALK	406.	CU	0	P04	2.07
		AL	0	CN	0	K	11.78
		NH3	.10	F	.68	RESO	-6.574
		AS	.022	ALFA	0	SE	0
		BA	.02	BETA	10.	SI02	45.55
		BE	0	OH	0	AG	0
		HCO3	495.	FE	0	SAR	1.011
		B	.21	PB	0	NA	63
		CD	0	LI	.09	SO4	375.
		CA	212.80	MG	49.52	SURF	0
		CO3	0	MN	0	TDS	1043.
		CL	66.80	HG	0	KJEL	.15
		CR	0	MO	0	VA	.012
		CO	0	NI	0	ZN	0
		COND	1580.	NO3	1.62	PH	7.20
35	06/07/88	ALK	415.	CU	0	P04	2.25
		AL	0	CN	0	K	11.59
		NH3	.04	F	.60	RESO	-3.898
		AS	.029	ALFA	0	SE	0
		BA	.04	BETA	0	SI02	44.90
		BE	0	OH	0	AG	0
		HCO3	506.	FE	0	SAR	1.946
		B	.20	PB	0	NA	110.49
		CD	0	LI	.08	SO4	353.
		CA	219.20	MG	15.30	SURF	0
		CO3	0	MN	0	TDS	1035.
		CL	59.20	HG	0	KJEL	.08
		CR	.002	MO	0	VA	.03
		CO	0	NI	0	ZN	0
		COND	1570.	NO3	3.70	PH	7.40

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

36	10/07/88	ALK	400.	CU	0	PO4	2.87
		AL	0	CN	0	K	11.46
		NH3	.06	F	.49	RESO	-4.248
		AS	.016	ALFA	0	SE	0
		BA	.04	BETA	8.	SI02	41.92
		BE	0	OH	0	AG	0
		HCO3	488.	FE	0	SAR	1.861
		B	.19	PB	0	NA	105.89
		CD	0	LI	.09	SO4	364.
		CA	201.60	MG	26.64	SURF	0
		CO3	0	MN	0	TDS	1025.
		CL	61.50	HG	0	KJEL	.09
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1580.	NO3	1.44	PH	7.80
37	03/23/89	ALK	362.	CU	0	PO4	3.80
		AL	0	CN	0	K	10.54
		NH3	.08	F	.59	RESO	-4.359
		AS	.02	ALFA	0	SE	0
		BA	.04	BETA	5.	SI02	42.07
		BE	0	OH	0	AG	0
		HCO3	442.	FE	0.	SAR	1.776
		B	.19	PB	0	NA	98.37
		CD	0	LI	.08	SO4	317.
		CA	217.60	MG	9.12	SURF	0
		CO3	0	MN	0	TDS	946.
		CL	76.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1450.	NO3	1.44	PH	7.40
38	05/15/89	ALK	387.	CU	0	PO4	3.25
		AL	0	CN	.003	K	11.65
		NH3	.07	F	.73	RESO	-3.822
		AS	.029	ALFA	0	SE	0
		BA	.04	BETA	0	SI02	41.90
		BE	0	OH	0	AG	0
		HCO3	472.	FE	0	SAR	1.951
		B	.18	PB	0	NA	107.85
		CD	0	LI	.09	SO4	336.
		CA	152.60	MG	48.	SURF	0
		CO3	0	MN	0	TDS	965.
		CL	59.	HG	0	KJEL	.10
		CR	0	MO	0	VA	.03
		CO	.02	NI	0	ZN	0
		COND	1480.	NO3	1.63	PH	7.60

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

39	09/11/89	ALK	389.	CU	0	PO4	3.20
		AL	0	CN	0	K	10.90
		NH3	.10	F	.55	RESO	-4.030
		AS	.029	ALFA	4.	SE	0
		BA	.04	BETA	7.	SI02	43.87
		BE	0	OH	0	AG	0
		HCO3	474.	FE	0	SAR	2.04
		B	.21	PB	0	NA	113.92
		CD	0	LI	.09	SO4	360.
		CA	154.80	MG	49.62	SURF	0
		CO3	0	MN	0	TDS	990.
		CL	58.30	HG	0	KJEL	.11
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1500.	NO3	1.54	PH	7.40
40	10/11/89	ALK	403.	CU	0	PO4	3.15
		AL	0	CN	0	K	11.29
		NH3	0	F	.57	RESO	-4.414
		AS	.023	ALFA	3.	SE	0
		BA	.04	BETA	3.	SI02	44.77
		BE	0	OH	0	AG	0
		HCO3	492.	FE	.05	SAR	1.975
		B	.19	PB	0	NA	113.42
		CD	0	LI	.09	SO4	380.
		CA	165.40	MG	51.43	SURF	0
		CO3	0	MN	0	TDS	1050.
		CL	56.70	HG	0	KJEL	0
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	0
		COND	1550.	NO3	1.63	PH	7.00
41	03/26/90	ALK	442.	CU	0	PO4	4.
		AL	0	CN	0	K	11.57
		NH3	.09	F	.47	RESO	-5.218
		AS	.03	ALFA	3.	SE	0
		BA	.05	BETA	8.	SI02	39.65
		BE	0	OH	0	AG	0
		HCO3	539.	FE	.06	SAR	2.038
		B	.21	PB	0	NA	124.20
		CD	0	LI	.10	SO4	365.
		CA	191.60	MG	54.68	SURF	0
		CO3	0	MN	0	TDS	1252.
		CL	60.70	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	1533.	NO3	1.23	PH	7.80

J R SIMPLOT - POCA TELLO

WELL #6 - CHEMICAL ANALYSES

CASE MO-DA-YR

42	07/05/90	ALK	434.	CU	0	PO4	4.60
		AL	0	CN	0	K	10.47
		NH3	.40	F	.52	RESO	-4.939
		AS	.036	ALFA	6.	SE	0
		BA	.04	BETA	9.	SI02	42.61
		BE	0	OH	0	AG	0
		HCO3	529.	FE	0	SAR	1.929
		B	.20	PB	0	NA	115.75
		CD	0	LI	.08	SO4	426.
		CA	181.70	MG	55.30	SURF	0
		CO3	0	MN	0	TDS	1180.
		CL	65.	HG	0	KJEL	1.38
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	0
		COND	1200.	NO3	1.48	PH	7.08
43	10/18/90	ALK	523.	CU	.03	PO4	5.60
		AL	.07	CN	0	K	13.67
		NH3	.04	F	.49	RESO	-6.543
		AS	.033	ALFA	4.	SE	0
		BA	.073	BETA	8.	SI02	5.90
		BE	.001	OH	0	AG	0
		HCO3	638.	FE	.18	SAR	.51
		B	.10	PB	.007	NA	176
		CD	0	LI	.12	SO4	507.
		CA	218.	MG	74.50	SURF	0
		CO3	0	MN	0	TDS	1488.
		CL	69.	HG	0	KJEL	.12
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	.10
		COND	1434.	NO3	1.36	PH	7.20

J R SIMPLOT - POCATELLO

WELL #6 - CHEMICAL ANALYSES

AVERAGES 05/03/78 TO 01/09/91

ALK	371.2	CU	.004	PO4	.141
AL	.035	CN	.002	K	10.941
NH3	.17	F	.689	RESO	-21.892
AS	.01	ALFA	2.4	SE	.00
BA	.067	BETA	6.3	SI02	38.633
BE	.00	OH	0	AG	.00
HCO3	453.7	FE	.031	SAR	1.909
B	.197	PB	.002	NA	102.47
CD	.00	LI	.076	SO4	304.
CA	154.93	MG	36.807	SURF	.003
CO3	.03	MN	.004	TDS	917.
CL	59.62	HG	.0001	KJEL	.391
CR	.002	MO	.001	VA	.006
CO	.002	NI	.001	ZN	.008
COND	1339.	NO3	1.399	PH	7.53

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHQS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

1	06/14/84	ALK	180.	CU	.009	PO4	.09
		AL	.005	CN	0	K	6.
		NH3	.22	F	.36	RESO	.62
		AS	0	ALFA	6.	SE	0
		BA	.35	BETA	11.	SI02	58.
		BE	0	OH	0	AG	0
		HCO3	219.6	FE	.12	SAR	.449
		B	.05	PB	.03	NA	15
		CD	.01	LI	.01	SO4	18.
		CA	59.	MG	15.50	SURF	0
		CO3	0	MN	0	TDS	268.
		CL	40.80	HG	0	KJEL	.35
		CR	0	MO	0	VA	0
		CO	0	NI	.05	ZN	.049
		COND	420.	NO3	.58	PH	7.10
2	08/22/84	ALK	165.	CU	.021	PO4	0
		AL	.05	CN	0	K	5.96
		NH3	.10	F	.18	RESO	-1.180
		AS	.005	ALFA	4.	SE	0
		BA	.07	BETA	7.	SI02	51.25
		BE	0	OH	0	AG	0
		HCO3	201.	FE	.09	SAR	3.054
		B	.099	PB	.04	NA	105
		CD	0	LI	.008	SO4	250.
		CA	60.	MG	18.	SURF	0
		CO3	0	MN	.01	TDS	580.
		CL	32.	HG	.0005	KJEL	.14
		CR	0	MO	0	VA	.006
		CO	0	NI	.02	ZN	.037
		COND	880.	NO3	1.60	PH	7.20
3	06/17/85	ALK	163.	CU	0	PO4	.08
		AL	0	CN	0	K	6.46
		NH3	.10	F	.26	RESO	.917
		AS	.004	ALFA	11.	SE	0
		BA	.07	BETA	23.	SI02	57.28
		BE	0	OH	0	AG	0
		HCO3	199.	FE	.03	SAR	1.865
		B	.11	PB	.008	NA	62
		CD	.002	LI	.009	SO4	120.
		CA	64.	MG	12.	SURF	0
		CO3	0	MN	.02	TDS	450.
		CL	42.40	HG	0	KJEL	.18
		CR	0	MO	.01	VA	0
		CO	0	NI	0	ZN	.012
		COND	700.	NO3	.15	PH	7.45

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CD	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	P04	K	RESO	SE	SI02	AG	SAR	NA	S04	SURF	TDS	KJEL	VA	ZN	PH
4	08/19/85	164.	0	.30	.003	.06	0	200.	.04	.001	62.40	0	45.	0	0	443.	0	0	.28	0	4.	0	.03	.014	.009	8.88	0	0	.01	0	.74	.04	4.60	-0.564	0	58.40	0	.626	20	16.	0	285.	.44	0	.023	7.65
5	11/20/85	163.	0	0	0	.05	0	199.	.06	0	64.80	0	40.30	0	0	448.	0	0	.30	0	0	0	.11	.004	.009	9.80	0	0	0	.77	.08	6.36	-0.776	0	54.52	0	.352	11.50	18.	1.65	316.	.30	0	0	8.55	
6	03/13/86	158.	.11	0	0	.06	0	193.	.11	0	62.80	0	38.70	0	0	375.	0	0	.28	4.	7.	0	.05	.006	.008	9.10	0	0	0	.69	.08	5.86	-0.717	0	56.76	0	.406	13.02	12.	0	245.	.12	0	0	7.81	

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

7	05/29/86	ALK	162.	CU	0	P04	.04
		AL	0	CN	1.756	K	6.
		NH3	.04	F	.29	RESD	.66
		AS	.004	ALFA	0	SE	0
		BA	.07	BETA	8.	SI02	55.81
		BE	0	OH	0	AG	0
		HCO3	198.	FE	0	SAR	.362
		B	.07	PB	0	NA	11.60
		CD	0	LI	.015	SD4	18.
		CA	63.20	MG	9.10	SURF	0
		CO3	0	MN	0	TDS	304.
		CL	38.70	HG	0	KJEL	.07
		CR	.001	MO	0	VA	0
		CO	0	NI	0	ZN	.015
		COND	470.	NO3	.79	PH	7.90
8	07/17/86	ALK	160.	CU	0	P04	.15
		AL	0	CN	0	K	6.62
		NH3	.20	F	.26	RESD	-0.779
		AS	.004	ALFA	0	SE	0
		BA	.06	BETA	26.	SI02	61.07
		BE	0	OH	0	AG	0
		HCO3	195.2	FE	.02	SAR	.467
		B	.07	PB	0	NA	15.14
		CD	0	LI	.01	SD4	6.
		CA	55.20	MG	14.90	SURF	0
		CO3	0	MN	0	TDS	285.
		CL	50.	HG	0	KJEL	.35
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.09
		COND	400.	NO3	.26	PH	7.60
9	10/14/86	ALK	160.	CU	0	P04	.12
		AL	0	CN	0	K	7.20
		NH3	.43	F	.25	RESD	-0.657
		AS	.005	ALFA	0	SE	0
		BA	.06	BETA	5.	SI02	54.10
		BE	0	OH	0	AG	0
		HCO3	195.2	FE	0	SAR	11.70
		B	.08	PB	.004	NA	11.70
		CD	0	LI	.009	SD4	14.
		CA	54.40	MG	13.90	SURF	0
		CO3	0	MN	0	TDS	275.
		CL	40.	HG	0	KJEL	.50
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.022
		COND	430.	NO3	.75	PH	7.80

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
10	02/13/87	ALK	158.	CU	0	PO4	.11				
		AL	0	CN	0	K	6.				
		NH3	.46	F	.34	RESD	-0.620				
		AS	0	ALFA	5.	SE	0				
		BA	.06	BETA	8.	SIO2	59.64				
		BE	0	OH	0	AG	0				
		HCO3	192.7	FE	0	SAR	.421				
		B	.06	PB	0	NA	13.30				
		CD	0	LI	0	SO4	16.				
		CA	53.60	MG	13.44	SURF	0				
		CO3	0	MN	0	TDS	245.				
		CL	35.	HG	0	KJEL	.55				
		CR	.012	MO	0	VA	.015				
		CO	0	NI	0	ZN	.022				
		COND	380.	NO3	.42	PH	7.80				
11	06/22/87	ALK	182.	CU	0	PO4	.11				
		AL	.04	CN	.73	K	6.				
		NH3	.06	F	.28	RESD	-0.258				
		AS	0	ALFA	0	SE	0				
		BA	.06	BETA	11.	SIO2	63.77				
		BE	0	OH	0	AG	0				
		HCO3	222.	FE	.02	SAR	.429				
		B	.09	PB	0	NA	12.86				
		CD	0	LI	0	SO4	14.				
		CA	60.	MG	11.	SURF	0				
		CO3	0	MN	0	TDS	265.				
		CL	27.	HG	0	KJEL	.10				
		CR	0	MO	0	VA	0				
		CO	0	NI	.02	ZN	.049				
		COND	390.	NO3	.72	PH	7.60				
12	08/27/87	ALK	173.	CU	0	PO4	.09				
		AL	.04	CN	0	K	5.89				
		NH3	.14	F	.27	RESD	-0.343				
		AS	.005	ALFA	0	SE	0				
		BA	.06	BETA	11.	SIO2	62.73				
		BE	0	OH	0	AG	0				
		HCO3	211.	FE	0	SAR	.552				
		B	.07	PB	.005	NA	17.50				
		CD	0	LI	0	SO4	16.				
		CA	52.75	MG	14.24	SURF	0				
		CO3	0	MN	0	TDS	251.				
		CL	36.50	HG	0	KJEL	.20				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	.03				
		COND	390.	NO3	.95	PH	7.40				

J R SIMPLOT - POCA TELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

13	11/11/87	ALK	160.	CU	0	P04	.13
		AL	0	CN	0	K	7.50
		NH3	.07	F	.14	RESO	-0.897
		AS	0	ALFA	0	SE	0
		BA	.05	BETA	9.	SI02	62.15
		BE	.002	OH	0	AG	0
		HCO3	195.	FE	0	SAR	.426
		B	.02	PB	0	NA	14.02
		CD	0	LI	0	SO4	25.
		CA	57.18	MG	15.10	SURF	0
		CO3	0	MN	0	TDS	255.
		CL	38.40	HG	0	KJEL	.11
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	385.	NO3	2.	PH	7.80
14	03/30/88	ALK	152.	CU	0	P04	.04
		AL	0	CN	0	K	5.96
		NH3	0	F	.25	RESO	-0.952
		AS	.005	ALFA	0	SE	0
		BA	.06	BETA	8.	SI02	63.21
		BE	0	OH	0	AG	0
		HCO3	185.	FE	0	SAR	.399
		B	.06	PB	0	NA	12.96
		CD	0	LI	0	SO4	24.
		CA	73.60	MG	3.80	SURF	0
		CO3	0	MN	0	TDS	300.
		CL	38.40	HG	0	KJEL	0
		CR	0	MO	0	VA	.028
		CO	0	NI	0	ZN	.01
		COND	385.	NO3	.60	PH	7.80
15	06/13/88	ALK	156.	CU	0	P04	.08
		AL	0	CN	.005	K	6.32
		NH3	.05	F	.25	RESO	-0.868
		AS	.004	ALFA	0	SE	0
		BA	.07	BETA	0	SI02	60.75
		BE	0	OH	0	AG	0
		HCO3	190.	FE	0	SAR	.369
		B	.03	PB	.004	NA	11.97
		CD	0	LI	0	SO4	17.
		CA	68.80	MG	6.70	SURF	0
		CO3	0	MN	0	TDS	255.
		CL	39.40	HG	0	KJEL	.06
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	390.	NO3	.68	PH	8.00

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

16	10/07/88	ALK	160.	CU	0	PO4	.10
		AL	0	CN	0	K	6.53
		NH3	0	F	.57	RESO	1.499
		AS	0	ALFA	4.	SE	0
		BA	.06	BETA	0	SI02	59.96
		BE	0	OH	0	AG	0
		HCO3	195.	FE	0	SAR	.367
		B	.03	PB	.003	NA	12.93
		CD	0	LI	0	SO4	15.
		CA	70.40	MG	14.40	SURF	0
		CO3	0	MN	0	TDS	280.
		CL	63.	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	450.	NO3	.58	PH	8.10
17	03/23/89	ALK	62.	CU	0	PO4	.15
		AL	0	CN	0	K	6.15
		NH3	.05	F	.57	RESO	-2.417
		AS	0	ALFA	4.	SE	0
		BA	.06	BETA	6.	SI02	60.22
		BE	0	OH	0	AG	0
		HCO3	198.	FE	0	SAR	.313
		B	.03	PB	0	NA	12.12
		CD	0	LI	0	SO4	86.
		CA	104.	MG	5.76	SURF	0
		CO3	0	MN	0	TDS	360.
		CL	42.20	HG	0	KJEL	.20
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.03
		COND	560.	NO3	.70	PH	7.70
18	06/05/89	ALK	158.	CU	0	PO4	.15
		AL	0	CN	0	K	6.33
		NH3	.06	F	.31	RESO	-0.898
		AS	0	ALFA	4.	SE	0
		BA	.06	BETA	7.	SI02	59.34
		BE	0	OH	0	AG	0
		HCO3	193.	FE	0	SAR	4.174
		B	.06	PB	0	NA	13.67
		CD	0	LI	.02	SO4	19.
		CA	56.20	MG	15.31	SURF	0
		CO3	0	MN	0	TDS	255.
		CL	42.20	HG	0	KJEL	.08
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.03
		COND	400.	NO3	.72	PH	7.40

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

19	09/11/89	ALK	158.	CU	0	PO4	.09
		AL	0	CN	0	K	5.95
		NH3	.07	F	.31	RESO	-0.750
		AS	.006	ALFA	0	SE	0
		BA	.06	BETA	9.	SI02	62.25
		BE	0	OH	0	AG	0
		HCO3	193.	FE	0	SAR	.38
		B	.04	PB	0	NA	12.23
		CD	0	LI	0	SO4	15.
		CA	53.19	MG	15.29	SURF	0
		CO3	0	MN	0	TDS	310.
		CL	42.60	HG	0	KJEL	.10
		CR	0	MO	.06	VA	0
		CO	0	NI	0	ZN	.02
		COND	397.	NO3	.71	PH	7.80
20	10/13/89	ALK	167.	CU	0	PO4	0
		AL	0	CN	0	K	6.20
		NH3	0	F	.29	RESO	-0.699
		AS	0	ALFA	0	SE	0
		BA	.06	BETA	7.	SI02	58.76
		BE	0	OH	0	AG	0
		HCO3	204.	FE	0	SAR	.406
		B	.02	PB	0	NA	13.29
		CD	0	LI	0	SO4	14.
		CA	55.94	MG	15.25	SURF	0
		CO3	0	MN	0	TDS	320.
		CL	39.80	HG	0	KJEL	0
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	.08
		COND	448.	NO3	.72	PH	7.70
21	04/02/90	ALK	173.	CU	0	PO4	.07
		AL	0	CN	0	K	5.81
		NH3	.04	F	.41	RESO	-0.348
		AS	0	ALFA	0	SE	0
		BA	.05	BETA	0	SI02	60.78
		BE	0	OH	0	AG	0
		HCO3	211.	FE	0	SAR	.458
		B	.02	PB	0	NA	14.53
		CD	.002	LI	0	SO4	14.
		CA	53.01	MG	14.14	SURF	0
		CO3	0	MN	0	TDS	338.
		CL	39.90	HG	0.00	KJEL	
		CR	0	MO	0	VA	.02
		CO	0	NI	0	ZN	.07
		COND	446.	NO3	.61	PH	7.70

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

22	07/06/90	ALK	154.	CU	0	P04	.07
		AL	0	CN	0	K	5.41
		NH3	.08	F	.27	RESD	-0.754
		AS	0	ALFA	0	SE	0
		BA	.06	BETA	0	SI02	59.53
		BE	0	OH	0	AG	0
		HCO3	188.	FE	0	SAR	.426
		B	0	PB	0	NA	13.57
		CD	0	LI	0	S04	18.
		CA	52.13	MG	15.03	SURF	0
		CO3	0	MN	0	TDS	350.
		CL	41.90	HG	0	KJEL	.40
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	366.	NO3	.66	PH	7.63
23	10/18/90	ALK	163.	CU	.03	P04	.08
		AL	.49	CN	0	K	6.81
		NH3	.05	F	.34	RESD	-1.171
		AS	.006	ALFA		SE	0
		BA	.062	BETA		SI02	32.78
		BE	0	OH	0	AG	0
		HCO3	199.	FE	.13	SAR	.41
		B	.14	PB	.01	NA	11.96
		CD	0	LI	.01	S04	16.
		CA	61.04	MG	16.89	SURF	.14
		CO3	0	MN	0	TDS	344.
		CL	35.70	HG	0	KJEL	.05
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.72
		COND	347.	NO3	.67	PH	7.90

J R SIMPLOT - POCATELLO

PEI #1 WELL - CHEMICAL ANALYSES

AVERAGES 06/14/84 TO 01/09/91

ALK	158.7	CU	.003	P04	.085
AL	.033	CN	.108	K	6.17
NH3	.11	F	.307	RESD	-0.520
AS	.002	ALFA	1.9	SE	0
BA	.073	BETA	7.6	SI02	57.959
BE	.00	OH	0	AG	0
HCO3	199.0	FE	.026	SAR	1.253
B	.059	PB	.006	NA	19.65
CD	.001	LI	.005	SD4	34.
CA	61.637	MG	12.501	SURF	.078
CO3	0	MN	.001	TDS	310.
CL	40.43	HG	.0001	KJEL	.195
CR	.001	MO	.003	VA	.003
CO	0	NI	.004	ZN	.059
COND	448.	NO3	.742	PH	7.71

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESD AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCA TELLO

PEI #2 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

1	06/14/84	ALK	764.	CU	.045	P04	.11
		AL	.011	CN	0	K	23.60
		NH3	.40	F	.24	RESO	14.69
		AS	0	ALFA	23.	SE	0
		BA	.24	BETA	15.	SI02	69.50
		BE	0	OH	0	AG	0
		HCO3	932.	FE	.10	SAR	1.41
		B	.07	PB	.032	NA	126
		CD	.021	LI	.04	SO4	780.
		CA	413.	MG	113.90	SURF	0
		CO3	0	MN	.02	TDS	2100.
		CL	14.90	HG	0	KJEL	.85
		CR	.01	MO	.04	VA	0
		CO	0	NI	.07	ZN	.102
		COND	3200.	NO3	1.99	PH	7.25
2	08/22/84	ALK	750.	CU	.014	P04	.18
		AL	0	CN	0	K	23.80
		NH3	.10	F	.09	RESO	-15.420
		AS	.004	ALFA	38.	SE	.012
		BA	.07	BETA	16.	SI02	31.50
		BE	0	OH	0	AG	0
		HCO3	915.	FE	.01	SAR	1.383
		B	.206	PB	.11	NA	124
		CD	0	LI	.039	SO4	790.
		CA	410.	MG	121.20	SURF	0
		CO3	0	MN	.02	TDS	2105.
		CL	160.	HG	.0007	KJEL	.25
		CR	.01	MO	0	VA	.02
		CO	0	NI	.06	ZN	.066
		COND	3200.	NO3	.59	PH	7.80
3	06/17/85	ALK	565.	CU	0	P04	.56
		AL	0	CN	0	K	24.69
		NH3	0	F	.15	RESO	-13.345
		AS	.021	ALFA	48.	SE	.004
		BA	.05	BETA	24.	SI02	68.87
		BE	0	OH	0	AG	0
		HCO3	689.	FE	0	SAR	2.602
		B	.24	PB	0	NA	210
		CD	0	LI	.04	SO4	904.
		CA	304.	MG	115.20	SURF	0
		CO3	0	MN	.03	TDS	2044.
		CL	18.40	HG	0	KJEL	0
		CR	0	MO	0	VA	.008
		CO	0	NI	0	ZN	.012
		COND	3200.	NO3	3.60	PH	7.25

J R SIMPLOT - POCATELLO

PEI #2 WELL - CHEMICAL ANALYSES

AVERAGES 06/14/84 TO 01/09/91

ALK	693.	CU	.02	PO4	.283
AL	.004	CN	0	K	24.03
NH3	.167	F	.16	RESO	-4.692
AS	.008	ALFA	36.3	SE	.005
BA	.12	BETA	18.3	SI02	56.623
BE	0	OH	0	AG	0
HCO3	845.3	FE	.037	SAR	1.798
B	.172	PB	.047	NA	153.33
CD	.007	LI	.04	S04	825.
CA	375.67	MG	116.77	SURF	0
CO3	0	MN	.023	TDS	2083.
CL	64.43	HG	.0002	KJEL	.367
CR	.007	MO	.013	VA	.009
CO	0	NI	.043	ZN	.06
COND	3200.	NO3	2.06	PH	7.43

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

1	06/14/84	ALK	1270.	CU	.033	PO4	.04
		AL	.01	CN	0	K	16.10
		NH3	.29	F	.25	RESO	14.13
		AS	0	ALFA	0	SE	0
		BA	.25	BETA	12.	SI02	88.
		BE	0	OH	0	AG	0
		HCO3	1549.4	FE	.09	SAR	7.12
		B	.10	PB	.016	NA	728
		CD	.028	LI	.04	SO4	2100.
		CA	590.	MG	122.80	SURF	0
		CO3	0	MN	.12	TDS	4430.
		CL	77.30	HG	0	KJEL	.70
		CR	.02	MO	.03	VA	.02
		CO	.02	NI	.02	ZN	.192
		COND	6800.	NO3	2.04	PH	6.95
2	08/22/84	ALK	1150.	CU	.039	PO4	.08
		AL	0	CN	0	K	16.30
		NH3	.10	F	.06	RESO	-12.880
		AS	.006	ALFA	0	SE	.022
		BA	.05	BETA	8.	SI02	54.25
		BE	0	OH	0	AG	0
		HCO3	1403.	FE	.07	SAR	6.879
		B	.188	PB	.16	NA	670
		CD	.002	LI	.044	SO4	1900.
		CA	476.	MG	147.60	SURF	0
		CO3	0	MN	.09	TDS	4068.
		CL	124.	HG	0	KJEL	.18
		CR	0	MO	0	VA	.017
		CO	0	NI	.10	ZN	.22
		COND	6200.	NO3	.12	PH	7.15
3	06/17/85	ALK	1070.	CU	0	PO4	2.40
		AL	0	CN	0	K	15.84
		NH3	.02	F	.07	RESO	12.42
		AS	.004	ALFA	8.	SE	.004
		BA	.03	BETA	14.	SI02	67.55
		BE	0	OH	0	AG	0
		HCO3	1305.	FE	0	SAR	7.458
		B	.53	PB	0	NA	705
		CD	.018	LI	.044	SO4	2000.
		CA	480.	MG	120.	SURF	.50
		CO3	0	MN	.04	TDS	4006.
		CL	84.30	HG	0	KJEL	.15
		CR	.03	MO	0	VA	.007
		CO	0	NI	0	ZN	.016
		COND	6250.	NO3	1.49	PH	7.05

J R SIMPLOT - POCA TELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

4	08/19/85	ALK	1180.	CU	.03	PO4	3.50
		AL	0	CN	0	K	13.50
		NH3	.15	F	.10	RESO	-12.210
		AS	.472	ALFA	0	SE	0
		BA	.04	BETA	0	SI02	72.20
		BE	0	OH	0	AG	.001
		HCO3	1440.	FE	.08	SAR	7.195
		B	.52	PB	0	NA	700
		CD	0	LI	.04	SO4	2030.
		CA	536.	MG	110.40	SURF	0
		CO3	0	MN	.06	TDS	4250.
		CL	84.	HG	0	KJEL	.23
		CR	0	MO	.01	VA	.023
		CO	0	NI	0	ZN	.205
		COND	6500.	NO3	1.78	PH	7.20

5	11/20/85	ALK	1105.	CU	.05	PO4	34.
		AL	0	CN	0	K	14.28
		NH3	0	F	.09	RESO	-14.457
		AS	.258	ALFA	0	SE	.002
		BA	.04	BETA	0	SI02	73.
		BE	0	OH	0	AG	0
		HCO3	1348.	FE	0	SAR	6.308
		B	.54	PB	0	NA	620
		CD	0	LI	.04	SO4	1910.
		CA	620.	MG	68.40	SURF	2.25
		CO3	0	MN	.02	TDS	4154.
		CL	80.40	HG	0	KJEL	.10
		CR	.004	MO	.03	VA	.023
		CO	0	NI	.13	ZN	.216
		COND	6120.	NO3	1.47	PH	7.00

6	03/13/86	ALK	1045.	CU	.04	PO4	35.50
		AL	0	CN	0	K	15.09
		NH3	0	F	.08	RESO	-14.834
		AS	.26	ALFA	0	SE	.007
		BA	.04	BETA	0	SI02	75.60
		BE	0	OH	0	AG	0
		HCO3	1275.	FE	.18	SAR	6.992
		B	.63	PB	0	NA	679.50
		CD	.013	LI	.041	SO4	1960.
		CA	566.	MG	91.20	SURF	0
		CO3	0	MN	.05	TDS	4126.
		CL	74.50	HG	0	KJEL	.20
		CR	.007	MO	0	VA	.11
		CO	0	NI	0	ZN	.433
		COND	6200.	NO3	2.05	PH	7.06

J R SIMPLOT - POCATELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

7	05/29/86	ALK	955.	CU	.05	PO4	28.
		AL	0	CN	0	K	13.50
		NH3	.64	F	.16	RESO	-14.130
		AS	.11	ALFA	0	SE	0
		BA	.03	BETA	12.	SI02	70.12
		BE	0	OH	0	AG	.001
		HCO3	1165.	FE	.05	SAR	6.358
		B	.59	PB	0	NA	595.80
		CD	.002	LI	.043	SD4	1835.
		CA	482.	MG	111.60	SURF	0
		CO3	0	MN	.06	TDS	3720.
		CL	83.70	HG	0	KJEL	.80
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	1.284
		COND	5700.	NO3	3.40	PH	7.15
8	07/17/86	ALK	778.	CU	.02	PO4	42.
		AL	0	CN	0	K	15.69
		NH3	.08	F	.04	RESO	-16.035
		AS	.356	ALFA	0	SE	.003
		BA	.04	BETA	11.	SI02	81.30
		BE	0	OH	0	AG	.002
		HCO3	949.2	FE	.29	SAR	6.763
		B	.595	PB	.04	NA	618
		CD	0	LI	.043	SD4	1940.
		CA	392.	MG	146.40	SURF	1.35
		CO3	0	MN	.05	TDS	3698.
		CL	94.20	HG	0	KJEL	.15
		CR	.013	MO	0	VA	0
		CO	0	NI	0	ZN	.235
		COND	5650.	NO3	1.64	PH	8.20
9	10/14/86	ALK	860.	CU	.03	PO4	75.
		AL	0	CN	0	K	17.10
		NH3	.71	F	.06	RESO	-11.237
		AS	.066	ALFA	0	SE	0
		BA	.04	BETA	0	SI02	83.40
		BE	0	OH	0	AG	0
		HCO3	1048.2	FE	.02	SAR	8.017
		B	.52	PB	0	NA	695
		CD	.005	LI	.041	SD4	1900.
		CA	392.	MG	100.	SURF	1.50
		CO3	0	MN	.03	TDS	3744.
		CL	97.60	HG	0	KJEL	1.10
		CR	.003	MO	0	VA	0
		CO	.07	NI	0	ZN	.152
		COND	5780.	NO3	1.25	PH	7.80

J R SIMPLOT - POCATELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

10	02/13/87	ALK	762.	CU	.04	PO4	69.
		AL	0	CN	0	K	13.77
		NH3	.20	F	.03	RESO	-15.172
		AS	.15	ALFA	0	SE	0
		BA	.03	BETA	5.	SI02	90.61
		BE	0	OH	0	AG	.001
		HCO3	929.6	FE	.04	SAR	8.124
		B	.58	PB	0	NA	728.30
		CD	0	LI	.033	SO4	2150.
		CA	420.	MG	115.	SURF	0
		CO3	0	MN	.03	TDS	3960.
		CL	72.70	HG	0	KJEL	.25
		CR	.002	MO	0	VA	0
		CO	0	NI	0	ZN	.162
		COND	6100.	NO3	4.50	PH	7.20
11	08/27/87	ALK	900.	CU	.03	PO4	3.45
		AL	0	CN	0	K	14.64
		NH3	.04	F	.10	RESO	-17.372
		AS	.019	ALFA	0	SE	.002
		BA	.03	BETA	7.	SI02	60.04
		BE	0	OH	0	AG	0
		HCO3	1098.	FE	.05	SAR	5.688
		B	.50	PB	0	NA	550
		CD	0	LI	.04	SO4	1892.
		CA	514.	MG	118.30	SURF	0
		CO3	0	MN	.03	TDS	3750.
		CL	97.60	HG	0	KJEL	.12
		CR	.03	MO	0	VA	0
		CO	0	NI	0	ZN	.13
		COND	5750.	NO3	.32	PH	6.60
12	11/11/87	ALK	860.	CU	.06	PO4	28.60
		AL	0	CN	0	K	15.45
		NH3	.24	F	.33	RESO	-19.416
		AS	.18	ALFA	0	SE	0
		BA	.04	BETA	7.	SI02	74.07
		BE	0	OH	0	AG	0
		HCO3	1049.	FE	.21	SAR	6.495
		B	.39	PB	.003	NA	638.90
		CD	.012	LI	.04	SO4	2130.
		CA	530.30	MG	123.50	SURF	0
		CO3	0	MN	.06	TDS	4050.
		CL	94.80	HG	0	KJEL	.30
		CR	.01	MO	0	VA	.01
		CO	0	NI	0	ZN	2.98
		COND	6250.	NO3	3.20	PH	7.60

J R SIMPLOT - POCATELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
13	03/30/88	ALK	750.	CU	.02	PO4	15.60				
		AL	0	CN	0	K	15.51				
		NH3	.23	F	.11	RESO	-22.060				
		AS	.13	ALFA	0	SE	0				
		BA	.04	BETA	10.	SI02	71.90				
		BE	0	OH	0	AG	0				
		HCO3	915.	FE	.04	SAR	5.654				
		B	.48	PB	0	NA	559.60				
		CD	0	LI	.04	SO4	2100.				
		CA	636.	MG	64.80	SURF	0				
		CO3	0	MN	.03	TDS	3924.				
		CL	87.80	HG	0	KJEL	.30				
		CR	0	MO	0	VA	.043				
		CO	0	NI	0	ZN	.14				
		COND	6050.	NO3	.57	PH	7.00				
		14	06/13/88	ALK	890.	CU	0	PO4	54.		
				AL	0	CN	0	K	14.68		
NH3	.10			F	.03	RESO	-12.112				
AS	.269			ALFA	0	SE	0				
BA	.04			BETA	4.	SI02	85.11				
BE	0			OH	0	AG	0				
HCO3	1086.			FE	.08	SAR	7.619				
B	.49			PB	0	NA	677.50				
CD	0			LI	.04	SO4	1850.				
CA	568.			MG	19.20	SURF	0				
CO3	0			MN	.03	TDS	3860.				
CL	96.			HG	0	KJEL	.10				
CR	.002			MO	0	VA	.02				
CO	0			NI	0	ZN	.24				
COND	5780.			NO3	3.45	PH	7.00				
15	10/07/88			ALK	618.	CU	0	PO4	64.		
				AL	0	CN	0	K	14.98		
		NH3	.04	F	.04	RESO	-15.012				
		AS	.029	ALFA	0	SE	.003				
		BA	.03	BETA	0	SI02	79.22				
		BE	0	OH	0	AG	0				
		HCO3	754.	FE	.16	SAR	7.769				
		B	.49	PB	.001	NA	660.80				
		CD	0	LI	.04	SO4	1990.				
		CA	320.80	MG	138.25	SURF	0				
		CO3	0	MN	0	TDS	3820.				
		CL	104.	HG	0	KJEL	.05				
		CR	.005	MO	0	VA	0				
		CO	0	NI	0	ZN	.11				
		COND	5550.	NO3	.73	PH	7.30				

J R SIMPLOT - POCATELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

16	03/23/89	ALK	651.	CU	0	P04	48.
		AL	0	CN	0	K	13.60
		NH3	0	F	.29	RESO	-16.253
		AS	.18	ALFA	0	SE	.003
		BA	.03	BETA	0	SI02	77.58
		BE	0	OH	0	AG	.002
		HCO3	794.	FE	.06	SAR	6.971
		B	.47	PB	0	NA	613.10
		CD	0	LI	.04	SO4	1980.
		CA	468.	MG	72.	SURF	0
		CO3	0	MN	0	TDS	3928.
		CL	100.	HG	0	KJEL	0
		CR	.003	MO	0	VA	0
		CO	0	NI	0	ZN	.22
		COND	6000.	NO3	2.70	PH	7.00
17	06/05/89	ALK	555.	CU	0	P04	16.90
		AL	0	CN	0	K	14.90
		NH3	.05	F	.10	RESO	-25.436
		AS	.082	ALFA	7.	SE	.003
		BA	.03	BETA	11.	SI02	64.52
		BE	0	OH	0	AG	0
		HCO3	677.	FE	.15	SAR	5.724
		B	.44	PB	0	NA	562.50
		CD	0	LI	.04	SO4	2250.
		CA	536.60	MG	118.70	SURF	.05
		CO3	0	MN	.03	TDS	3920.
		CL	100.	HG	0	KJEL	.10
		CR	.003	MO	0	VA	0
		CO	0	NI	0	ZN	.12
		COND	6030.	NO3	.49	PH	6.90
18	09/11/89	ALK	675.	CU	0	P04	37.
		AL	0	CN	0	K	14.12
		NH3	.07	F	.12	RESO	-23.080
		AS	.203	ALFA	9.	SE	0
		BA	.05	BETA	10.	SI02	79.50
		BE	0	OH	0	AG	0
		HCO3	824.	FE	.05	SAR	6.35
		B	.44	PB	0	NA	624.40
		CD	.006	LI	.04	SO4	2250.
		CA	530.90	MG	122.80	SURF	0
		CO3	0	MN	0	TDS	4065.
		CL	106.	HG	0	KJEL	.10
		CR	.008	MO	0	VA	.02
		CO	0	NI	0	ZN	1.74
		COND	6200.	NO3	1.14	PH	7.50

J R SIMPLOT - POCATELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
19	10/13/89	ALK	540.	CU	0	P04	78.				
		AL	0	CN	0	K	14.13				
		NH3	0	F	0	RESO	27.45				
		AS	.277	ALFA	7.	SE	0				
		BA	.03	BETA	6.	SI02	44.57				
		BE	0	OH	0	AG	0				
		HCO3	659.	FE	.11	SAR	7.191				
		B	.57	PB	0	NA	723.10				
		CD	0	LI	.05	S04	2650.				
		CA	549.50	MG	131.80	SURF	0				
		CO3	0	MN	.02	TDS	4550.				
		CL	109.	HG	0	KJEL	0				
		CR	0	MO	0	VA	.03				
		CO	0	NI	0	ZN	.18				
		COND	6930.	NO3	3.75	PH	7.00				
20	04/02/90	ALK	661.	CU	0	P04	25.20				
		AL	0	CN	0	K	12.29				
		NH3	.06	F	.22	RESO	23.94				
		AS	.255	ALFA	0	SE	0				
		BA	.02	BETA	5.	SI02	98.03				
		BE	0	OH	0	AG	0				
		HCO3	806.	FE	.07	SAR	7.658				
		B	.59	PB	0	NA	758.80				
		CD	0	LI	.08	S04	1880.				
		CA	527.40	MG	131.80	SURF	0				
		CO3	0	MN	0	TDS	4264.				
		CL	118.	HG	0.00	KJEL	0				
		CR	0	MO	0	VA	.04				
		CO	0	NI	0	ZN	.11				
		COND	4378.	NO3	3.20	PH	7.50				
21	07/06/90	ALK	620.	CU	.05	P04	84.50				
		AL	.14	CN	0	K	12.79				
		NH3	.47	F	0	RESO	-25.352				
		AS	.336	ALFA	5.	SE	0				
		BA	.04	BETA	0	SI02	93.60				
		BE	0	OH	0	AG	0				
		HCO3	756.	FE	.12	SAR	7.081				
		B	.67	PB	0	NA	707.20				
		CD	.007	LI	.10	S04	2125.				
		CA	516.20	MG	145.80	SURF	0				
		CO3	0	MN	.02	TDS	3972.				
		CL	121.	HG	0	KJEL	1.71				
		CR	0	MO	0	VA	.02				
		CO	0	NI	0	ZN	1.44				
		COND	3330.	NO3	2.03	PH	6.65				

J R SIMPLOT - POCA TELLO

PEI #3 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

22	10/18/90	ALK	613.	CU	0	PO4	71.
		AL	.09	CN	0	K	13.92
		NH3	.05	F	.06	RESO	-15.186
		AS	.46	ALFA		SE	0
		BA	.033	BETA		SIO2	38.07
		BE	.003	OH	0	AG	0
		HCO3	748.	FE	.19	SAR	.76
		B	.55	PB	.005	NA	665.50
		CD	0	LI	.09	SD4	1974.
		CA	354.	MG	119.	SURF	.10
		CO3	0	MN	0	TDS	4098.
		CL	110.	HG	0	KJEL	.06
		CR	0	MO	0	VA	.02
		CO	0	NI	0	ZN	2.12
		COND	3440.	NO3	3.85	PH	6.80

J R SIMPLOT - POCATELLO.

PEI #3 WELL - CHEMICAL ANALYSES

AVERAGES 06/14/84 TO 01/09/91

ALK	841.3	CU	.022	PO4	.08
AL	.011	CN	0	K	14.645
NH3	.161	F	.106	RESO	-10.195
AS	.186	ALFA	1.7	SE	.002
BA	.046	BETA	5.8	SI02	73.738
BE	.00	OH	0	AG	.00
HCO3	1026.3	FE	.096	SAR	6.644
B	.494	PB	.01	NA	658.23
CD	.004	LI	.048	SO4	2036.
CA	500.26	MG	110.88	SURF	.261
CO3	0.	MN	.035	TDS	4016.
CL	96.22	HG	0.00	KJEL	.305
CR	.006	MO	.003	VA	.018
CO	.004	NI	.011	ZN	.575
COND	5772.	NO3	2.053	PH	7.16

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

1	06/14/84	ALK	154.	CU	.006	P04	.08
		AL	.006	CN	0	K	9.50
		NH3	.17	F	.31	RESO	.08
		AS	0	ALFA	0	SE	0
		BA	.22	BETA	11.	SI02	21.
		BE	0	OH	0	AG	0
		HCO3	187.8	FE	.13	SAR	1.70
		B	.11	PB	.005	NA	48
		CD	0	LI	.03	SO4	40.
		CA	20.	MG	24.30	SURF	0
		CO3	0	MN	0	TDS	310.
		CL	53.90	HG	0	KJEL	.50
		CR	0	MO	.02	VA	.06
		CO	.03	NI	.01	ZN	.044
		COND	450.	NO3	.45	PH	7.90
2	08/22/84	ALK	205.	CU	.022	P04	.20
		AL	.04	CN	0	K	7.95
		NH3	.10	F	.17	RESO	-2.848
		AS	.008	ALFA	4.	SE	0
		BA	.14	BETA	5.	SI02	23.21
		BE	0	OH	0	AG	0
		HCO3	250.	FE	.10	SAR	1.369
		B	.365	PB	.04	NA	58.70
		CD	0	LI	.038	SO4	113.
		CA	70.	MG	42.	SURF	0
		CO3	0	MN	.01	TDS	530.
		CL	109.	HG	0	KJEL	.14
		CR	0	MO	0	VA	0
		CO	0	NI	.03	ZN	.041
		COND	800.	NO3	1.64	PH	7.40
3	04/18/85	ALK	306.	CU	.05	P04	.06
		AL	.09	CN	0	K	8.10
		NH3	2.	F	.19	RESO	-1.510
		AS	0	ALFA	0	SE	0
		BA	.06	BETA	9.	SI02	21.03
		BE	0	OH	0	AG	0
		HCO3	373.	FE	.06	SAR	1.404
		B	.37	PB	.016	NA	63
		CD	0	LI	.035	SO4	104.
		CA	96.63	MG	34.06	SURF	0
		CO3	0	MN	0	TDS	575.
		CL	71.	HG	0	KJEL	3.60
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.038
		COND	880.	NO3	2.40	PH	7.30

J R SIMPLOT - POCATELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

4	06/17/85	ALK	327.	CU	0	PO4	1.
		AL	0	CN	0	K	8.16
		NH3	.08	F	.19	RESD	-0.288
		AS	0	ALFA	25.	SE	0
		BA	.15	BETA	15.	SI02	24.50
		BE	0	OH	0	AG	0
		HCO3	399.	FE	0	SAR	2.001
		B	.30	PB	.004	NA	85
		CD	0	LI	.039	SD4	93.
		CA	78.40	MG	35.50	SURF	0
		CO3	0	MN	0	TDS	595.
		CL	90.60	HG	0	KJEL	.12
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	910.	NO3	1.92	PH	7.70
5	08/19/85	ALK	329.	CU	0	PO4	.82
		AL	0	CN	0	K	5.10
		NH3	.05	F	.19	RESD	-0.225
		AS	.002	ALFA	0	SE	0
		BA	.13	BETA	5.	SI02	22.25
		BE	0	OH	0	AG	0
		HCO3	401.	FE	0	SAR	1.604
		B	.19	PB	.013	NA	68
		CD	0	LI	.034	SD4	80.
		CA	91.20	MG	27.36	SURF	0
		CO3	0	MN	0	TDS	524.
		CL	67.60	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.022
		COND	810.	NO3	1.81	PH	7.80
6	11/20/85	ALK	333.	CU	0	PO4	14.80
		AL	0	CN	0	K	7.30
		NH3	0	F	.20	RESD	-0.517
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	5.	SI02	23.50
		BE	0	OH	0	AG	0
		HCO3	406.	FE	.03	SAR	1.24
		B	.26	PB	.001	NA	54
		CD	0	LI	.036	SD4	61.
		CA	96.	MG	29.	SURF	1.45
		CO3	0	MN	0	TDS	534.
		CL	68.10	HG	0	KJEL	.08
		CR	0	MO	0	VA	.013
		CO	0	NI	0	ZN	0
		COND	830.	NO3	1.92	PH	7.80

J R SIMPLOT - POCA TELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

7	03/13/86	ALK	324.	CU	0	PO4	.06
		AL	0	CN	0	K	6.94
		NH3	0	F	.18	RESO	-0.876
		AS	0	ALFA	0	SE	.002
		BA	.14	BETA	4.	SI02	23.30
		BE	0	OH	0	AG	0
		HCO3	395.	FE	0	SAR	1.334
		B	.25	PB	0	NA	58.80
		CD	0	LI	.036	SO4	77.
		CA	89.20	MG	35.30	SURF	0
		CO3	0	MN	0	TDS	536.
		CL	79.30	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	880.	NO3	1.66	PH	7.84
8	05/29/86	ALK	289.	CU	0	PO4	.07
		AL	0	CN	0	K	6.23
		NH3	.08	F	.22	RESO	-1.170
		AS	0	ALFA	0	SE	0
		BA	.12	BETA	11.	SI02	23.34
		BE	0	OH	0	AG	0
		HCO3	353.	FE	0	SAR	1.329
		B	.22	PB	.006	NA	57
		CD	0	LI	.035	SO4	84.
		CA	90.40	MG	29.80	SURF	0
		CO3	0	MN	.02	TDS	534.
		CL	77.10	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.009
		COND	820.	NO3	1.53	PH	7.95
9	07/17/86	ALK	302.	CU	0	PO4	.11
		AL	0	CN	0	K	7.69
		NH3	.19	F	.19	RESO	-0.712
		AS	0	ALFA	0	SE	0
		BA	.12	BETA	15.	SI02	24.56
		BE	0	OH	0	AG	0
		HCO3	368.4	FE	0	SAR	1.368
		B	.214	PB	0	NA	56.50
		CD	0	LI	.035	SO4	71.
		CA	80.80	MG	33.10	SURF	0
		CO3	0	MN	0	TDS	520.
		CL	72.	HG	0	KJEL	.25
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.022
		COND	790.	NO3	1.30	PH	7.90

J R SIMPLOT - POCA TELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

10	10/14/86	ALK	318.	CU	0	PO4	1.48
		AL	0	CN	0	K	8.10
		NH3	.41	F	.17	RESO	-0.477
		AS	0	ALFA	0	SE	0
		BA	.15	BETA	6.	SI02	25.40
		BE	0	OH	0	AG	0
		HCO3	388.	FE	.03	SAR	1.195
		B	.17	PB	0	NA	50.80
		CD	0	LI	.037	SO4	38.
		CA	89.60	MG	28.80	SURF	0
		CO3	0	MN	0	TDS	490.
		CL	76.90	HG	0	KJEL	.85
		CR	0	MO	0	VA	0
		CO	.02	NI	0	ZN	0
		COND	760.	NO3	2.11	PH	8.00
11	02/13/87	ALK	324.	CU	0	PO4	.11
		AL	0	CN	0	K	7.04
		NH3	.08	F	.22	RESO	-0.285
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	0	SI02	24.90
		BE	0	OH	0	AG	0
		HCO3	395.2	FE	.04	SAR	1.389
		B	.26	PB	0	NA	56.20
		CD	0	LI	.03	SO4	74.
		CA	80.	MG	26.80	SURF	0
		CO3	0	MN	0	TDS	469.
		CL	30.	HG	0	KJEL	.11
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.014
		COND	725.	NO3	2.50	PH	8.00
12	06/22/87	ALK	315.	CU	0	PO4	.21
		AL	.05	CN	0	K	6.72
		NH3	.04	F	.20	RESO	-0.660
		AS	0	ALFA	0	SE	0
		BA	.13	BETA	5.	SI02	27.47
		BE	0	OH	0	AG	0
		HCO3	384.	FE	0	SAR	1.155
		B	.23	PB	0	NA	49.55
		CD	0	LI	.02	SO4	58.
		CA	98.40	MG	24.90	SURF	0
		CO3	0	MN	0	TDS	499.
		CL	64.	HG	0	KJEL	.08
		CR	0	MO	0	VA	0
		CO	0	NI	.02	ZN	.055
		COND	775.	NO3	1.62	PH	7.80

J R SIMPLOT - POCATELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

13	08/27/87	ALK	314.	CU	0	PO4	.13
		AL	0	CN	0	K	6.66
		NH3	.06	F	.19	RESO	-0.211
		AS	0	ALFA	0	SE	0
		BA	.11	BETA	7.	SI02	24.86
		BE	0	OH	0	AG	0
		HCO3	383.	FE	0	SAR	1.328
		B	.25	PB	0	NA	55
		CD	0	LI	.04	SO4	55.
		CA	79.50	MG	30.70	SURF	0
		CO3	0	MN	0	TDS	488.
		CL	61.50	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	750.	NO3	2.01	PH	7.40
14	11/11/87	ALK	316.	CU	0	PO4	.13
		AL	0	CN	0	K	7.35
		NH3	.06	F	.20	RESO	-0.640
		AS	0	ALFA	0	SE	0
		BA	.12	BETA	0	SI02	27.59
		BE	0	OH	0	AG	0
		HCO3	386.	FE	0	SAR	1.125
		B	.16	PB	0	NA	48.30
		CD	0	LI	.03	SO4	59.
		CA	86.05	MG	32.53	SURF	0
		CO3	0	MN	0	TDS	499.
		CL	62.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	780.	NO3	2.80	PH	8.05
15	03/30/88	ALK	321.	CU	0	PO4	0
		AL	0	CN	0	K	6.83
		NH3	0	F	.19	RESO	-0.260
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	7.	SI02	27.
		BE	0	OH	0	AG	0
		HCO3	392.	FE	0	SAR	1.14
		B	.19	PB	0	NA	47.96
		CD	0	LI	.02	SO4	43.
		CA	108.	MG	15.80	SURF	0
		CO3	0	MN	0	TDS	496.
		CL	61.	HG	0	KJEL	0
		CR	0	MO	0	VA	.025
		CO	0	NI	0	ZN	0
		COND	750.	NO3	1.49	PH	7.60

J R SIMPLOT - POCATELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

16	06/13/88	ALK	302.	CU	0	PO4	.10
		AL	.04	CN	0	K	6.73
		NH3	.10	F	.17	RESO	-0.344
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	0	SI02	26.69
		BE	0	OH	0	AG	0
		HCO3	368.	FE	.08	SAR	1.145
		B	.16	PB	0	NA	47
		CD	0	LI	.03	SO4	44.
		CA	112.	MG	9.60	SURF	0
		CO3	0	MN	0	TDS	471.
		CL	61.50	HG	0	KJEL	.10
		CR	.004	MO	.02	VA	0
		CO	0	NI	0	ZN	.01
		COND	750.	NO3	1.61	PH	8.00
17	03/23/89	ALK	298.	CU	0	PO4	.13
		AL	0	CN	0	K	6.89
		NH3	0	F	.21	RESO	-3.477
		AS	0	ALFA	0	SE	0
		BA	.13	BETA	0	SI02	26.71
		BE	0	OH	0	AG	0
		HCO3	364.	FE	0	SAR	.854
		B	.14	PB	0	NA	42.70
		CD	0	LI	.03	SO4	160.
		CA	128.	MG	37.20	SURF	0
		CO3	0	MN	0	TDS	620.
		CL	67.50	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.01
		COND	950.	NO3	1.60	PH	7.60
18	06/05/89	ALK	303.	CU	0	PO4	.08
		AL	0	CN	0	K	6.63
		NH3	.07	F	.17	RESO	-1.022
		AS	0	ALFA	5.	SE	0
		BA	.13	BETA	6.	SI02	25.06
		BE	0	OH	0	AG	0
		HCO3	370.	FE	.04	SAR	1.045
		B	.11	PB	0	NA	45.26
		CD	0	LI	.04	SO4	53.
		CA	87.03	MG	33.40	SURF	0
		CO3	0	MN	.02	TDS	477.
		CL	66.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	756.	NO3	1.73	PH	7.70

J R SIMPLOT - POCATELLO

PEI #4 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

19	09/11/89	ALK	291.	CU	0	P04	.13
		AL	0	CN	0	K	6.66
		NH3	0	F	.22	RESO	-1.030
		AS	0	ALFA	0	SE	0
		BA	.13	BETA	7.	SI02	27.43
		BE	0	OH	0	AG	0
		HCO3	355.	FE	.05	SAR	1.03
		B	.15	PB	0	NA	44.01
		CD	0	LI	.04	SO4	68.
		CA	83.67	MG	32.62	SURF	0
		CO3	0	MN	0	TDS	477.
		CL	57.	HG	0	KJEL	0
		CR	.004	MO	0	VA	0
		CO	0	NI	0	ZN	.14
		COND	712.	NO3	1.59	PH	7.80
20	10/13/89	ALK	316.	CU	0	P04	.05
		AL	0	CN	0	K	7.08
		NH3	.91	F	.17	RESO	-0.584
		AS	0	ALFA	3.	SE	0
		BA	.13	BETA	8.	SI02	22.38
		BE	0	OH	0	AG	0
		HCO3	386.	FE	0.	SAR	.996
		B	.16	PB	0	NA	42.59
		CD	0	LI	.03	SO4	47.
		CA	84.34	MG	32.89	SURF	0
		CO3	0	MN	0	TDS	516.
		CL	58.	HG	0	KJEL	1.12
		CR	0	MO	0	VA	0
		CO	.02	NI	0	ZN	.01
		COND	715.	NO3	1.37	PH	7.70
21	07/06/90	ALK	310.	CU	0	P04	.17
		AL	0	CN	0	K	6.65
		NH3	.21	F	.19	RESO	-0.517
		AS	0	ALFA	0	SE	0
		BA	.12	BETA	0	SI02	25.04
		BE	0	OH	0	AG	0
		HCO3	378.	FE	0	SAR	1.034
		B	.14	PB	0	NA	43.57
		CD	0	LI	.03	SO4	53.
		CA	81.91	MG	31.96	SURF	0
		CO3	0	MN	0	TDS	588.
		CL	68.	HG	0	KJEL	1.77
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	.03
		COND	630.	NO3	1.49	PH	7.57

J R SIMPLOT - POCA TELLO

PEI 84 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

22	10/18/90	ALK	311.	CU	0	P04	.12
		AL	.18	CN	0	K	6.19
		NH3	.04	F	.16	RESO	-0.977
		AS	.005	ALFA		SE	0
		BA	.13	BETA		SIO2	30.06
		BE	0	OH	0	AG	0
		HCO3	379.	FE	.15	SAR	.60
		B	.20	PB	.002	NA	42.53
		CD	0	LI	.05	SO4	48.
		CA	88.09	MG	34.	SURF	0
		CO3	0	MN	0	TDS	548.
		CL	60.	HG	0	KJEL	.02
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.04
		COND	637.	NO3	1.36	PH	7.70

J R SIMPLOT - POCATELLO

PEI #4 WELL - CHEMICAL ANALYSES

AVERAGES 06/14/84 TO 01/09/91

ALK	300.4	CU	.004	P04	.911
AL	.018	CN	0	K	7.114
NH3	.211	F	.195	RESO	-0.843
AS	.001	ALFA	1.8	SE	.00
BA	.133	BETA	6.	SIO2	24.876
BE	0	OH	0	AG	0
HCO3	366.4	FE	.032	SAR	1.245
B	.209	PB	.004	NA	52.93
CD	0	LI	.034	SO4	69.
CA	87.237	MG	30.074	SURF	.066
CO3	0	MN	.002	TDS	513.
CL	67.36	HG	0	KJEL	.425
CR	.00	MO	.002	VA	.005
CO	.003	NI	.003	ZN	.023
COND	766.	NO3	1.723	PH	7.75

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER

J R SIMPLOT - POCATELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

1	06/14/84	ALK	134.	CU	.016	PO4	.15
		AL	.002	CN	0	K	2.20
		NH3	.20	F	.68	RESO	1.76
		AS	0	ALFA	8.	SE	0
		BA	.40	BETA	8.	SI02	29.
		BE	0	OH	0	AG	0
		HCO3	163.4	FE	.10	SAR	.59
		B	.06	PB	0	NA	20.40
		CD	.004	LI	0	SO4	38.
		CA	64.	MG	15.10	SURF	0
		CO3	0	MN	.01	TDS	290.
		CL	64.	HG	0	KJEL	.60
		CR	0	MO	0	VA	0
		CO	0	NI	.10	ZN	.043
		COND	460.	NO3	1.74	PH	7.40
2	08/22/84	ALK	125.	CU	.053	PO4	0
		AL	.07	CN	0	K	1.92
		NH3	0	F	.25	RESO	-1.590
		AS	.002	ALFA	0	SE	0
		BA	.05	BETA	0	SI02	25.41
		BE	0	OH	0	AG	0
		HCO3	152.	FE	.08	SAR	4.203
		B	.161	PB	.04	NA	38
		CD	0	LI	.008	SO4	27.
		CA	60.	MG	13.20	SURF	0
		CO3	0	MN	.01	TDS	631.
		CL	74.90	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	.02	ZN	.036
		COND	980.	NO3	.65	PH	7.30
3	06/17/85	ALK	124.	CU	0	PO4	.14
		AL	.15	CN	0	K	2.12
		NH3	.08	F	.36	RESO	-0.989
		AS	0	ALFA	4.	SE	0
		BA	.05	BETA	8.	SI02	27.02
		BE	0	OH	0	AG	0
		HCO3	151.	FE	.05	SAR	.684
		B	.11	PB	.004	NA	20.70
		CD	0	LI	.008	SO4	20.
		CA	53.60	MG	9.60	SURF	0
		CO3	0	MN	.03	TDS	245.
		CL	51.50	HG	0	KJEL	0
		CR	0	MO	.01	VA	0
		CO	0	NI	0	ZN	.048
		COND	380.	NO3	2.22	PH	7.35

J R SIMPLOT - POCATELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

4	08/19/85	ALK	121.	CU	0	PO4	.06
		AL	.28	CN	0	K	2.10
		NH3	.05	F	.30	RESD	-0.878
		AS	.003	ALFA	0	SE	0
		BA	.04	BETA	0	SI02	25.82
		BE	.002	OH	0	AG	0
		HCO3	148.	FE	.19	SAR	1.049
		B	.04	PB	0	NA	31
		CD	0	LI	.008	SO4	34.
		CA	50.40	MG	9.60	SURF	0
		CO3	0	MN	0	TDS	284.
		CL	53.40	HG	0	KJEL	.09
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	0
		COND	434.	NO3	1.92	PH	7.60
5	03/13/86	ALK	178.	CU	0	PO4	.16
		AL	.19	CN	0	K	2.07
		NH3	0	F	.25	RESD	1.02
		AS	0	ALFA	0	SE	0
		BA	.07	BETA	0	SI02	29.17
		BE	0	OH	0	AG	0
		HCO3	217.	FE	.12	SAR	.814
		B	.15	PB	0	NA	28.30
		CD	0	LI	.012	SO4	32.
		CA	70.	MG	13.20	SURF	0
		CO3	0	MN	.02	TDS	322.
		CL	60.70	HG	0	KJEL	.13
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.148
		COND	495.	NO3	1.97	PH	7.63
6	05/29/86	ALK	124.	CU	0	PO4	.08
		AL	0	CN	.036	K	1.73
		NH3	.03	F	.31	RESD	-1.030
		AS	0	ALFA	4.	SE	0
		BA	.04	BETA	15.	SI02	27.62
		BE	0	OH	0	AG	0
		HCO3	151.	FE	.03	SAR	.661
		B	.09	PB	0	NA	20.12
		CD	0	LI	.011	SO4	28.
		CA	54.	MG	9.80	SURF	0
		CO3	0	MN	0	TDS	245.
		CL	47.90	HG	0	KJEL	.05
		CR	0	MO	0	VA	.005
		CO	0	NI	.05	ZN	.196
		COND	380.	NO3	2.08	PH	7.50

J R SIMPLOT - POCA TELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

7	07/17/86	ALK	122.	CU	.03	PO4	.39
		AL	.26	CN	0	K	2.40
		NH3	.24	F	.34	RESO	-0.946
		AS	0	ALFA	0	SE	0
		BA	.05	BETA	0	SI02	29.01
		BE	0	OH	0	AG	0
		HCO3	148.8	FE	.23	SAR	.679
		B	.088	PB	.003	NA	20.30
		CD	0	LI	.01	SO4	18.
		CA	51.20	MG	10.10	SURF	0
		CO3	0	MN	.02	TDS	255.
		CL	51.20	HG	0	KJEL	.29
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.672
		COND	380.	NO3	1.30	PH	7.30

8	10/14/86	ALK	120.	CU	0	PO4	.12
		AL	0	CN	0	K	2.30
		NH3	.45	F	.28	RESO	-0.945
		AS	0	ALFA	4.	SE	0
		BA	.04	BETA	5.	SI02	26.60
		BE	0	OH	0	AG	0
		HCO3	146.4	FE	.07	SAR	.636
		B	.12	PB	0	NA	18.90
		CD	0	LI	.006	SO4	26.
		CA	50.40	MG	10.10	SURF	0
		CO3	0	MN	0	TDS	221.
		CL	48.	HG	0	KJEL	.65
		CR	0	MO	0	VA	0
		CO	.02	NI	0	ZN	.022
		COND	350.	NO3	2.19	PH	7.80

9	02/13/87	ALK	126.	CU	0	PO4	.13
		AL	.14	CN	0	K	2.06
		NH3	.05	F	.40	RESO	-4.888
		AS	0	ALFA	0	SE	0
		BA	.06	BETA	0	SI02	27.92
		BE	0	OH	0	AG	0
		HCO3	153.7	FE	.13	SAR	.509
		B	.05	PB	0	NA	22.50
		CD	0	LI	0	SO4	24.
		CA	50.40	MG	5.90	SURF	0
		CO3	0	MN	.02	TDS	415.
		CL	18.50	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.086
		COND	640.	NO3	1.31	PH	7.80

J R SIMPLOT - POCA TELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

10	06/22/87	ALK	127.	CU	0	P04	.36
		AL	.16	CN	.021	K	2.19
		NH3	.05	F	.29	RESD	-1.400
		AS	0	ALFA	0	SE	0
		BA	.05	BETA	5.	SI02	31.67
		BE	0	OH	0	AG	0
		HCO3	155.	FE	.15	SAR	.65
		B	.08	PB	0	NA	20.99
		CD	0	LI	0	SO4	23.
		CA	69.60	MG	5.70	SURF	0
		CO3	0	MN	.02	TDS	368.
		CL	63.	HG	0	KJEL	0
		CR	0	MO	0	VA	0
		CO	0	NI	.02	ZN	.041
		COND	420.	NO3	1.91	PH	7.60
11	08/27/87	ALK	127.	CU	0	P04	.13
		AL	.27	CN	0	K	1.77
		NH3	.07	F	.30	RESD	.876
		AS	0	ALFA	12.	SE	0
		BA	.05	BETA	14.	SI02	29.66
		BE	0	OH	0	AG	0
		HCO3	155.	FE	.19	SAR	.915
		B	.09	PB	.008	NA	27.50
		CD	0	LI	0	SO4	27.
		CA	47.95	MG	12.46	SURF	0
		CO3	0	MN	0	TDS	268.
		CL	57.50	HG	0	KJEL	.15
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.06
		COND	395.	NO3	2.29	PH	7.20
12	11/11/87	ALK	127.	CU	0	P04	.11
		AL	.52	CN	0	K	2.57
		NH3	.10	F	.36	RESD	-1.141
		AS	0	ALFA	0	SE	0
		BA	.05	BETA	0	SI02	31.75
		BE	0	OH	0	AG	0
		HCO3	155.	FE	.16	SAR	.683
		B	.04	PB	0	NA	21.30
		CD	0	LI	0	SO4	60.
		CA	52.28	MG	13.06	SURF	0
		CO3	0	MN	.02	TDS	268.
		CL	27.	HG	0	KJEL	.15
		CR	.004	MO	0	VA	0
		CO	0	NI	0	ZN	.11
		COND	400.	NO3	2.60	PH	7.30

J R SIMPLOT - POCATELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
13	03/30/88	ALK	64.	CU	0	P04	.10				
		AL	.56	CN	0	K	1.93				
		NH3	.28	F	.34	RESO	-1.424				
		AS	0	ALFA	0	SE	0				
		BA	.07	BETA	4.	SI02	37.44				
		BE	0	OH	0	AG	0				
		HCO3	200.	FE	.26	SAR	.687				
		B	.06	PB	0	NA	24.22				
		CD	0	LI	0	SO4	55.				
		CA	93.60	MG	.40	SURF	0				
		CO3	0	MN	.03	TDS	336.				
		CL	51.30	HG	0	KJEL	.35				
		CR	0	MO	0	VA	.022				
		CO	0	NI	0	ZN	.17				
		COND	500.	NO3	1.79	PH	7.40				
		14	06/13/88	ALK	172.	CU	0	P04	.15		
AL	.21			CN	0	K	2.19				
NH3	.10			F	.31	RESO	-1.261				
AS	0			ALFA	0	SE	0				
BA	.07			BETA	0	SI02	33.68				
BE	0			OH	0	AG	0				
HCO3	210.			FE	.26	SAR	.605				
B	.05			PB	0	NA	21.33				
CD	0			LI	0	SO4	27.				
CA	92.80			MG	.90	SURF	0				
CO3	0			MN	0	TDS	321.				
CL	56.			HG	0	KJEL	.20				
CR	0			MO	0	VA	.01				
CO	0			NI	0	ZN	.11				
COND	480.			NO3	1.79	PH	7.80				
15	10/07/88			ALK	168.	CU	0	P04	.24		
		AL	.16	CN	0	K	1.71				
		NH3	.15	F	.48	RESO	-1.821				
		AS	.006	ALFA	4.	SE	0				
		BA	.09	BETA	4.	SI02	33.10				
		BE	0	OH	0	AG	0				
		HCO3	205.	FE	.168	SAR	.596				
		B	.17	PB	.007	NA	22.04				
		CD	.002	LI	0	SO4	27.				
		CA	91.60	MG	7.44	SURF	0				
		CO3	0	MN	.11	TDS	325.				
		CL	75.	HG	0	KJEL	0				
		CR	.023	MO	0	VA	0				
		CO	0	NI	0	ZN	.19				
		COND	500.	NO3	1.27	PH	7.90				

J R SIMPLOT - POCATELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
16	03/23/89	ALK	220.	CU	0	PO4	1.06				
		AL	.07	CN	0	K	2.67				
		NH3	.23	F	.21	RESO	-1.269				
		AS	0	ALFA	10.	SE	0				
		BA	.09	BETA	4.	SI02	38.11				
		BE	0	OH	0	AG	0				
		HCO3	268.	FE	.07	SAR	.638				
		B	.05	PB	0	NA	24.70				
		CD	0	LI	.02	SO4	44.				
		CA	105.60	MG	4.80	SURF	0				
		CO3	0	MN	0	TDS	424.				
		CL	58.	HG	0	KJEL	.50				
		CR	.004	MO	0	VA	0				
		CO	0	NI	0	ZN	.26				
		COND	590.	NO3	1.93	PH	7.20				
		17	06/05/89	ALK	160.	CU	0	PO4	.25		
				AL	.08	CN	0	K	2.50		
NH3	.41			F	.26	RESO	-1.303				
AS	0			ALFA	7.	SE	0				
BA	.07			BETA	7.	SI02	35.76				
BE	0			OH	0	AG	0				
HCO3	195.			FE	.09	SAR	6.626				
B	.02			PB	0	NA	22.84				
CD	0			LI	.02	SO4	28.				
CA	64.10			MG	15.83	SURF	0				
CO3	0			MN	0	TDS	295.				
CL	60.			HG	0	KJEL	.55				
CR	0			MO	0	VA	0				
CO	0			NI	0	ZN	.42				
COND	460.			NO3	2.70	PH	7.10				
18	09/11/89			ALK	144.	CU	0	PO4	.49		
				AL	.09	CN	0	K	2.34		
		NH3	.11	F	.16	RESO	-1.650				
		AS	.004	ALFA	0	SE	0				
		BA	.07	BETA	4.	SI02	37.34				
		BE	0	OH	0	AG	0				
		HCO3	176.	FE	.05	SAR	.68				
		B	.09	PB	0	NA	23.53				
		CD	0	LI	0	SO4	39.				
		CA	64.53	MG	16.08	SURF	0				
		CO3	0	MN	0	TDS	342.				
		CL	63.	HG	0	KJEL	.14				
		CR	.006	MO	0	VA	0				
		CO	0	NI	0	ZN	.08				
		COND	489.	NO3	2.18	PH	7.30				

J R SIMPLOT - POCATELLO

PEI #5 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
19	10/13/89	ALK	179.	CU	0	PO4	1.03				
		AL	0	CN	0	K	2.86				
		NH3	.28	F	.16	RESD	-2.052				
		AS	0	ALFA	0	SE	0				
		BA	.09	BETA	4.	SI02	18.86				
		BE	0	OH	0	AG	0				
		HCO3	218.	FE	0	SAR	.679				
		B	.06	PB	0	NA	26.20				
		CD	0	LI	0	SO4	74.				
		CA	79.74	MG	20.04	SURF	0				
		CO3	0	MN	0	TDS	388.				
		CL	64.	HG	0	KJEL	.35				
		CR	0	MO	0	VA	0				
		CO	.02	NI	0	ZN	.06				
		COND	585.	NO3	2.16	PH	7.00				
		20	07/06/90	ALK	188.	CU	0	PO4	.69		
				AL	1.81	CN	0	K	2.69		
NH3	.43			F	.42	RESD	-1.729				
AS	0			ALFA	0	SE	0				
BA	.10			BETA	0	SI02	5.09				
BE	0			OH	0	AG	0				
HCO3	229.			FE	.19	SAR	.693				
B	.04			PB	.011	NA	26.38				
CD	.003			LI	.02	SO4	36.				
CA	66.92			MG	26.09	SURF	0				
CO3	0			MN	.11	TDS	426.				
CL	56.90			HG	.0004	KJEL	.91				
CR	.03			MO	0	VA	0				
CO	0			NI	0	ZN	.63				
COND	467.			NO3	1.77	PH	6.84				
21	10/18/90			ALK	190.	CU	0	PO4	.69		
				AL	.24	CN	0	K	2.97		
		NH3	.32	F	.75	RESD	-0.603				
		AS	.016	ALFA		SE	0				
		BA	.09	BETA		SI02	65.61				
		BE	.001	OH	0	AG	0				
		HCO3	232.	FE	.13	SAR	.91				
		B	.13	PB	.003	NA	27.72				
		CD	.008	LI	.02	SO4	39.				
		CA	62.88	MG	15.55	SURF	.03				
		CO3	0	MN	.06	TDS	424.				
		CL	58.	HG	0	KJEL	.06				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	1.06				
		COND	471.	NO3	1.89	PH	7.10				

J R SIMPLOT - POCATELLO

PEI #5 WELL - CHEMICAL ANALYSES

AVERAGES 06/14/84 TO 01/09/91

ALK	144.8	CU	.005	P04	.311
AL	.251	CN	.003	K	2.252
NH3	.173	F	.343	RESO	-1.108
AS	.001	ALFA	2.7	SE	0
BA	.08	BETA	4.1	SI02	30.745
BE	.00	OH	0	AG	0
HCO3	182.3	FE	.129	SAR	1.152
B	.083	PB	.004	NA	24.24
CD	.001	LI	.007	S04	35.
CA	66.457	MG	11.188	SURF	.001
CO3	0	MN	.022	TDS	338.
CL	55.23	HG	0.00	KJEL	.256
CR	.003	MO	.00	VA	.002
CO	.002	NI	.009	ZN	.212
COND	488.	NO3	1.889	PH	7.40

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J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

1	06/14/84	ALK	293.	CU	.016	P04	.04
		AL	.01	CN	0	K	5.80
		NH3	.24	F	.40	RESD	.09
		AS	0	ALFA	0	SE	0
		BA	.35	BETA	5.	SI02	23.50
		BE	0	OH	0	AG	0
		HCO3	357.4	FE	.12	SAR	1.21
		B	.02	PB	.044	NA	48.30
		CD	.007	LI	.03	SO4	43.
		CA	74.	MG	27.50	SURF	0
		CO3	0	MN	.01	TDS	430.
		CL	48.20	HG	0	KJEL	.85
		CR	0	MO	0	VA	.05
		CO	0	NI	.04	ZN	.108
		COND	680.	NO3	1.23	PH	7.35
2	08/22/84	ALK	340.	CU	.018	P04	0
		AL	.07	CN	.005	K	6.75
		NH3	.20	F	.17	RESD	-1.440
		AS	.003	ALFA	0	SE	0
		BA	.16	BETA	3.	SI02	23.57
		BE	0	OH	0	AG	0
		HCO3	415.	FE	.11	SAR	1.234
		B	.04	PB	.05	NA	57.60
		CD	0	LI	.037	SO4	98.
		CA	100.	MG	39.60	SURF	0
		CO3	0	MN	0	TDS	608.
		CL	69.	HG	0	KJEL	.35
		CR	0	MO	0	VA	0
		CO	0	NI	.03	ZN	.052
		COND	880.	NO3	.67	PH	7.30
3	04/18/85	ALK	341.	CU	.03	P04	.12
		AL	.06	CN	0	K	7.20
		NH3	0	F	.19	RESD	-1.160
		AS	0	ALFA	0	SE	0
		BA	0	BETA	5.	SI02	21.22
		BE	0	OH	0.	AG	0
		HCO3	416.	FE	.02	SAR	1.285
		B	.41	PB	.02	NA	59
		CD	0	LI	.034	SO4	88.
		CA	100.58	MG	36.	SURF	0
		CO3	0	MN	0	TDS	571.
		CL	69.	HG	0	KJEL	.35
		CR	0	MO	0	VA	.002
		CO	0	NI	.02	ZN	.022
		COND	885.	NO3	2.50	PH	7.50

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

4	06/17/85	ALK	336.	CU	0	PO4	.05
		AL	0	CN	0	K	7.04
		NH3	.05	F	.22	RESO	.248
		AS	.002	ALFA	7.	SE	0
		BA	.14	BETA	16.	SI02	23.13
		BE	0	OH	0	AG	0
		HCO3	410.	FE	0	SAR	1.572
		B	.30	PB	.004	NA	65
		CD	0	LI	.036	SD4	49.
		CA	77.20	MG	31.90	SURF	0
		CO3	0	MN	0	TDS	510.
		CL	68.20	HG	0	KJEL	.10
		CR	0	MO	0	VA	.003
		CO	0	NI	0	ZN	.034
		COND	790.	NO3	2.27	PH	7.65
5	08/19/85	ALK	327.	CU	0	PO4	.08
		AL	0	CN	0	K	6.90
		NH3	.05	F	.20	RESO	-0.019
		AS	0	ALFA	0	SE	0
		BA	.13	BETA	8.	SI02	24.59
		BE	0	OH	0	AG	0
		HCO3	399.	FE	.05	SAR	1.393
		B	.24	PB	0	NA	58
		CD	0	LI	.034	SD4	47.
		CA	89.60	MG	25.44	SURF	0
		CO3	0	MN	0	TDS	488.
		CL	62.10	HG	0	KJEL	.07
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.016
		COND	750.	NO3	1.96	PH	7.75
6	11/20/85	ALK	331.	CU	0	PO4	.06
		AL	.02	CN	0	K	7.09
		NH3	0	F	.21	RESO	-0.489
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	5.	SI02	24.30
		BE	0	OH	0	AG	0
		HCO3	404.	FE	.03	SAR	1.109
		B	.24	PB	.008	NA	48.10
		CD	0	LI	.036	SD4	45.
		CA	90.	MG	31.90	SURF	0
		CO3	0	MN	0	TDS	518.
		CL	61.60	HG	0	KJEL	.08
		CR	.002	MO	0	VA	.014
		CO	0	NI	0	ZN	0
		COND	775.	NO3	2.13	PH	7.85

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	CHEMICAL ANALYSES									
7	03/13/86	ALK	320.	CU	.02	PO4	.10				
		AL	.12	CN	0	K	6.74				
		NH3	.07	F	.19	RESD	-0.484				
		AS	0	ALFA	0	SE	0				
		BA	.15	BETA	0	SI02	24.28				
		BE	0	OH	0	AG	0				
		HCO3	390.	FE	.17	SAR	1.262				
		B	.27	PB	.007	NA	53.82				
		CD	0	LI	.038	SO4	47.				
		CA	87.60	MG	30.50	SURF	0				
		CO3	0	MN	0	TDS	498.				
		CL	63.50	HG	0	KJEL	.10				
		CR	.01	MO	0	VA	0				
		CO	0	NI	0	ZN	.049				
		COND	851.	NO3	2.09	PH	7.82				
		8	05/29/86	ALK	285.	CU	0	PO4	.04		
				AL	0	CN	0	K	5.33		
NH3	.08			F	.22	RESD	-0.420				
AS	0			ALFA	0	SE	0				
BA	.12			BETA	6.	SI02	22.51				
BE	0			OH	0	AG	0				
HCO3	348.			FE	0.	SAR	1.019				
B	.19			PB	.012	NA	41.04				
CD	0			LI	.039	SO4	51.				
CA	80.40			MG	25.70	SURF	0				
CO3	0			MN	0	TDS	430.				
CL	49.30			HG	0	KJEL	.12				
CR	0			MO	0	VA	0				
CO	0			NI	0	ZN	.021				
COND	799.			NO3	1.09	PH	7.90				
9	07/17/86			ALK	318.	CU	0	PO4	.08		
				AL	0	CN	0	K	7.26		
		NH3	.09	F	.20	RESD	-0.595				
		AS	0	ALFA	9.	SE	0				
		BA	.12	BETA	10.	SI02	25.01				
		BE	0	OH	0	AG	0				
		HCO3	388.	FE	0	SAR	1.166				
		B	.231	PB	0	NA	49.99				
		CD	0	LI	.036	SO4	34.				
		CA	87.20	MG	31.70	SURF	0				
		CO3	0	MN	0	TDS	495.				
		CL	76.	HG	0	KJEL	.14				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	.054				
		COND	760.	NO3	1.55	PH	8.00				

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MD-DA-YR

CASE	MD-DA-YR	CHEMICAL ANALYSES									
10	10/14/86	ALK	324.	CU	0	P04	.10				
		AL	0	CN	0	K	7.70				
		NH3	.44	F	.19	RESD	-0.322				
		AS	0	ALFA	0	SE	0				
		BA	.14	BETA	7.	SI02	24.70				
		BE	0	OH	0	AG	0				
		HCO3	395.3	FE	0	SAR	1.148				
		B	.28	PB	0	NA	48.70				
		CD	0	LI	.033	SD4	35.				
		CA	91.20	MG	27.40	SURF	0				
		CO3	0	MN	0	TDS	482.				
		CL	70.20	HG	0	KJEL	.85				
		CR	.003	MO	0	VA	0				
		CO	0	NI	0	ZN	.019				
		COND	750.	NO3	2.21	PH	8.20				
11	02/13/87	ALK	336.	CU	0	P04	.13				
		AL	0	CN	0	K	6.55				
		NH3	.11	F	.23	RESD	-0.135				
		AS	0	ALFA	0	SE	0				
		BA	.14	BETA	5.	SI02	24.50				
		BE	0	OH	0	AG	0				
		HCO3	409.9	FE	.02	SAR	1.558				
		B	.24	PB	0	NA	65				
		CD	0	LI	.024	SD4	57.				
		CA	72.	MG	36.40	SURF	0				
		CO3	0	MN	0	TDS	503.				
		CL	65.90	HG	0	KJEL	.15				
		CR	0	MO	0	VA	0				
		CO	0	NI	0	ZN	.029				
		COND	775.	NO3	1.61	PH	8.20				
12	06/22/87	ALK	312.	CU	0	P04	.11				
		AL	.03	CN	.023	K	6.37				
		NH3	.04	F	.20	RESD	-0.641				
		AS	.002	ALFA	0	SE	0				
		BA	.13	BETA	5.	SI02	27.55				
		BE	0	OH	0	AG	0				
		HCO3	381.	FE	.04	SAR	1.077				
		B	.22	PB	0	NA	45.98				
		CD	0	LI	.02	SD4	46.				
		CA	112.	MG	15.80	SURF	0				
		CO3	0	MN	0	TDS	488.				
		CL	62.	HG	0	KJEL	.06				
		CR	0	MO	0	VA	0				
		CO	0	NI	.04	ZN	.07				
		COND	750.	NO3	1.77	PH	7.80				

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

13	08/27/87	ALK	311.	CU	0.	PO4	.09
		AL	0	CN	0	K	6.26
		NH3	.05	F	.18	RESO	.152
		AS	0	ALFA	0	SE	0
		BA	.11	BETA	13.	SI02	25.65
		BE	0	OH	0	AG	0
		HCO3	379.	FE	.09	SAR	1.201
		B	.24	PB	0	NA	52
		CD	0	LI	.04	SO4	48.
		CA	77.79	MG	30.23	SURF	0
		CO3	0	MN	0	TDS	470.
		CL	62.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.02
		COND	750.	NO3	2.13	PH	7.20

14	11/11/87	ALK	316.	CU	0	PO4	.12
		AL	0	CN	0	K	7.49
		NH3	.10	F	.18	RESO	-0.786
		AS	0	ALFA	0	SE	0
		BA	.12	BETA	8.	SI02	27.41
		BE	0	OH	0	AG	0
		HCO3	386.	FE	.02	SAR	1.062
		B	.16	PB	0	NA	46.11
		CD	0	LI	.03	SO4	56.
		CA	86.32	MG	34.15	SURF	0
		CO3	0	MN	0	TDS	480.
		CL	58.50	HG	0	KJEL	.12
		CR	0	MO	0	VA	0
		CO	.007	NI	0	ZN	.03
		COND	750.	NO3	2.20	PH	7.80

15	03/30/88	ALK	313.	CU	0	PO4	.05
		AL	0	CN	0	K	6.72
		NH3	.09	F	.18	RESO	-0.864
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	7.	SI02	26.38
		BE	0	OH	0	AG	0
		HCO3	382.	FE	0	SAR	1.10
		B	.18	PB	0	NA	47.74
		CD	0	LI	.02	SO4	60.
		CA	121.60	MG	12.90	SURF	0
		CO3	0	MN	0	TDS	510.
		CL	61.	HG	0	KJEL	.10
		CR	.005	MO	0	VA	.025
		CO	0	NI	0	ZN	.03
		COND	780.	NO3	1.72	PH	7.60

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

16	06/13/88	ALK	310.	CU	0	PO4	.11
		AL	.02	CN	0	K	6.61
		NH3	.60	F	.18	RESO	-0.747
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	0	SIO2	26.34
		BE	0	OH	0	AG	0
		HCO3	378.	FE	0	SAR	1.007
		B	.14	PB	0	NA	43.15
		CD	0	LI	.04	SO4	48.
		CA	139.20	MG	25.	SURF	0
		CO3	0	MN	0	TDS	499.
		CL	60.	HG	0	KJEL	.08
		CR	0	MO	0	VA	.01
		CO	0	NI	0	ZN	.01
		COND	765.	NO3	1.71	PH	8.00
17	10/07/88	ALK	315.	CU	0	PO4	.12
		AL	0	CN	0	K	6.73
		NH3	.09	F	.23	RESO	-0.809
		AS	0	ALFA	0	SE	0
		BA	.14	BETA	0	SIO2	25.34
		BE	0	OH	0	AG	0
		HCO3	384.	FE	.07	SAR	.937
		B	.14	PB	0	NA	40.59
		CD	0	LI	.04	SO4	46.
		CA	72.80	MG	42.24	SURF	0
		CO3	0	MN	0	TDS	459.
		CL	57.	HG	0	KJEL	.10
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.06
		COND	720.	NO3	1.10	PH	8.20
18	03/23/89	ALK	304.	CU	0	PO4	.20
		AL	0	CN	0	K	6.53
		NH3	0	F	.22	RESO	-3.067
		AS	0	ALFA	12.	SE	0
		BA	.14	BETA	5.	SIO2	25.62
		BE	0	OH	0	AG	0
		HCO3	371.	FE	0	SAR	.896
		B	.13	PB	0	NA	44.04
		CD	0	LI	.04	SO4	150.
		CA	128.	MG	33.60	SURF	0
		CO3	0	MN	0	TDS	620.
		CL	67.50	HG	0	KJEL	0
		CR	.003	MO	0	VA	0
		CO	0	NI	0	ZN	.03
		COND	950.	NO3	1.84	PH	7.70

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

CASE	MO-DA-YR	ALK	AL	NH3	AS	BA	BE	HCO3	B	CO	CA	CO3	CL	CR	CO	COND	CU	CN	F	ALFA	BETA	OH	FE	PB	LI	MG	MN	HG	MO	NI	NO3	PO4	K	RESD	SE	SI02	AG	SAR	NA	SO4	SURF	TDS	KJEL	VA	ZN	PH
19	06/05/89	244.	0	.04	0	.13	0	297.	.11	0	85.41	0	64.	0	0	765.	0	0	.18	6.	9.	0	.04	0	0	.04	.02	0	0	0	1.95	.10	6.69	-2.115	0	25.02	0	1.029	44.27	109.	0	495.	.08	0	0	7.30
20	09/11/89	295.	0	0	0	.13	0	360.	.17	0	82.88	0	56.	0	0	714.	0	0	.18	0	5.	0	0	0	.04	31.73	0	0	0	0	1.54	.13	6.65	-0.840	0	26.81	0	1.03	43.37	58.	0	467.	0	0	.01	7.80
21	10/13/89	312.	0	.10	0	.13	0	381.	.14	0	85.44	0	57.	0	.02	804.	0	0	.23	4.	12.	0	.06	0	.04	33.98	0	0	0	0	1.56	.15	7.	-0.810	0	22.54	0	.982	42.42	50.	0	540.	.25	.01	.05	7.70

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

CASE MO-DA-YR

22	07/06/90	ALK	313.	CU	0	PO4	.23
		AL	0	CN	0	K	6.27
		NH3	.19	F	.20	RESO	-0.367
		AS	0	ALFA	0	SE	0
		BA	.12	BETA	4.	SI02	25.19
		BE	0	OH	0	AG	0
		HCO3	382.	FE	.05	SAR	1.056
		B	.15	PB	0	NA	44.21
		CD	0	LI	.04	SO4	58.
		CA	82.74	MG	30.43	SURF	0
		CO3	0	MN	0	TDS	550.
		CL	68.50	HG	0	KJEL	.61
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.06
		COND	653.	NO3	1.63	PH	7.54
23	10/18/90	ALK	306.	CU	.03	PO4	.26
		AL	.09	CN	0	K	7.59
		NH3	.08	F	.22	RESO	.12
		AS	.004	ALFA		SE	0
		BA	.133	BETA		SI02	67.30
		BE	.002	OH	0	AG	0
		HCO3	375.	FE	.08	SAR	.77
		B	.15	PB	.007	NA	39.44
		CD	0	LI	.04	SO4	41.
		CA	73.14	MG	28.34	SURF	0
		CO3	0	MN	0	TDS	520.
		CL	58.50	HG	0	KJEL	.04
		CR	0	MO	0	VA	0
		CO	0	NI	0	ZN	.25
		COND	643.	NO3	1.56	PH	7.70

J R SIMPLOT - POCATELLO

PEI #6 WELL - CHEMICAL ANALYSES

AVERAGES 06/14/84 TO 01/09/91

ALK	313.1	CU	.005	PO4	.107
AL	.018	CN	.001	K	6.751
NH3	.118	F	.209	RESO	-0.674
AS	.00	ALFA	1.7	SE	0
BA	.137	BETA	6.3	SI02	26.629
BE	.00	OH	0	AG	0
HCO3	382.1	FE	.042	SAR	1.135
B	.191	PB	.007	NA	49.04
CD	.00	LI	.035	SO4	59.
CA	91.178	MG	30.247	SURF	0
CO3	0	MN	.001	TDS	506.
CL	62.39	HG	0	KJEL	.204
CR	.001	MO	0	VA	.005
CO	.001	NI	.006	ZN	.045
COND	771.	NO3	1.74	PH	7.73

ALFA AND BETA IN PICOCURIES PER LITER

CONDUCTIVITY IN UMHOS PER CENTIMETER

RESO AND SAR ARE CALCULATED

REMAINDER IN MILLIGRAMS PER LITER